LISBON SCHOOL OF ECONOMICS & MANAGEMENT
UNIVERSIDADE DE LISBOA

# MASTER

MASTER'S IN FINANCE

# MASTER´S FINAL WORK

DISSERTATION

# PREDATORY LENDING IN THE GLOBAL FINANCIAL CRISIS OF 2007/09: A REVIEW OF THE LITERATURE

BRUNO CÉSAR DA TERRA AGUIAR

OCTOBER - 2018

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BY BRUNO AGUIAR

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# ABSTRACT

This dissertation is about ethical failures on the offspring of the financial crisis of 2007-2009 and puts its main emphasis on an issue identified as one of the causes of that crisis, namely predatory lending. The objective of this work is to determine the influences of predatory lending as a cause to that financial crisis and to identify the kind of practices it involved to be aware on their repetition, so as to avoid another financial crisis caused by repetition of the same mistakes.

I use as methodology a meta-analysis of documents published since 2004 on the subject of predatory lending, using Scopus database as reference. I try to get an overview of the scientific production on this topic and verify if predatory lending was a relevant cause to the financial crisis of 2007-2009. I get to the conclusion that, despite not being the most relevant factor, it played an important role in feeding a many cogs' greater machine that ultimately caused the crisis.

With this dissertation, I hope to give a modest contribution about what caused the latest great financial crisis. This way we can be more observant in comparing present reality with the one that preceded the financial crisis of 2007-2009 to avoid making the same mistakes.

Keywords: predatory lending; ethics; financial crisis

# RESUMO

Esta dissertação é sobre falhas éticas na origem da crise financeira de 2007-2009 e coloca a principal ênfase num tema identificado como uma das causas dessa crise, nomeadamente os empréstimos predatórios. O objetivo deste trabalho é determinar a influência dos empréstimos predatórios como causa para essa crise financeira e identificar o tipo de práticas que incluíram, para que estejamos alerta à sua repetição, de modo a evitar outra crise financeira pela repetição dos mesmos erros.

Uso como metodologia uma meta-análise de documentos publicados desde 2004 sobre o assunto dos empréstimos predatórios, usando a base de dados Scopus como referência. Tento obter uma visão geral da produção científica neste tópico e verificar se os empréstimos predatórios foram uma causa relevante para a crise financeira de 2007-2009. Concluo que, apesar de não ter sido o fator mais relevante, desempenhou um importante papel ao alimentar uma máquina maior com muitas rodas que foi a grande causadora da crise.

Com esta dissertação, espero dar um modesto contributo sobre os motivos da última grande crise financeira. Desta forma poderemos estar mais atentos na comparação da realidade atual com aquela que precedeu a crise financeira de 2007-2009 para evitar cometer os mesmos erros.

Palavras-chave: empréstimos predatórios; ética; crise financeira

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# 1. Introduction

Included in the Master's in Finance at ISEG – Lisbon School of Economics and Management of Universidade de Lisboa, I decided to present as Master's Final Work a dissertation on the topic "Ethical failures on the offspring of the global financial crisis of 2007–2009".

At the beginning of this century, occurred a financial crisis that was the biggest economic crisis most living persons have ever experienced. The financial crisis of 2007-2009 started in the USA but spread worldwide. It had tremendously negative effects in worldwide populations that, in the end, were the most penalized by the costs of the crisis.

It is important to be attentive to the acts of those who can influence the markets including financial institutions. The Finance discipline is the best branch of the Economic sciences to study the causes and consequences of the financial crisis of 2007-2009. Economics and Finance are the disciplines who can play the best role in the prevention of a new crisis.

Under the supervision of Professor Rafael Jorge Soares Duarte Marques, teacher at ISEG, I make a theoretical review of relevant literature concerning possible explanations to what led to the collapse of financial markets, with my focus on the United States of America (U.S.A.) that was the epicentre of the crisis and the nation most affected by it.

I consider it is important to make a Dissertation on the topic of ethics because this subject has gained relevance in recent years including with the CFA Institute. By lack of space in a work like this, I focus on a theme that can be considered one of the main causes of the financial crisis of 2007-2009 that was predatory lending, and how important it was. "Whether predatory lending was an important factor in precipitating

the subprime crisis is one of the key questions in the academic and policy debate about the sources of the crisis and its aftermath" (Agarwal, 2014, p. 20).

This Master's Final Work is a meta-analysis of documents published since 2004, selected from searching the keyword "predatory lending" in Scopus database, having found 170 articles. This search was made on the 1st of October 2018. I analyse 23 documents, including articles, reviews, an editorial and a note, with a critical perspective, differentiating the methodologies used by each author and their main results.

My objectives are to understand the way an ethical problem such as predatory lending might have contributed to the 2007-2009 financial crisis, share knowledge in an easy manner, and add value in the field of ethics.

I leave the discussion open to those that have more time and space, to deepen the investigation on other possible causes to the crisis. These possible causes include: failures on corporate governance and risk management, trading of credit default swaps and collateralized debt obligations backed by subprime mortgages and of other derivative contracts, trading of complex financial instruments where the traders sometimes did not completely know the products they were selling, loose monetary policy and the housing bubble, failure of regulatory agencies and deregulation, misbehaviour by credit rating agencies, short-termism of executives, and hedge funds. Nowadays, ethics is gaining field in the teaching of Finance as a growingly important part of creating the next generation of managers and directors, what can be beneficial to society as a whole. A commitment to high ethical standards is more than ever needed to maintain the public's trust in financial markets and in finance professionals.

After this introduction, I start by describing the methodology used in this work followed by a presentation of the theme "predatory lending". Then I expose the results of the studies I analyse, sub-dividing those results in various topics such as racial discrimination and legislation effects on predatory lending. After that, I analyse and discuss the results

and follow with the conclusion and a chapter about the limitations of this work and perspectives of future research. Then I present the bibliography cited in the work and end up with two annexes, one with a table of the articles discussed in this review of the literature, and another with a brief description of the statistical models and variables used by the authors that included a quantitative methodology on their studies, to complement the information presented on the section “Results”.

# 2. Methodology

Though there is a vast literature both with quantitative and qualitative analysis on the financial crisis of 2007-2009 and on ethical failures in its offspring, it is not on the scope of this Master’s Dissertation to analyse it all. I focus on predatory lending as one of the ethical failures on the origin of that crisis. About this topic, there´s a vast and relevant literature published in the last decade and a half. So, my study concentrates on documents published about predatory lending since 2004, that I consider worth reviewing in a Master’s in Finance dissertation scope. My main objective is trying to elucidate how influent was predatory lending on the origin of the aforementioned crisis.

I have started by searching the expression “predatory lending” on the Scopus database on the 1st of October 2018. That search gave me 170 documents, that I then refined until I had 23 documents to analyse. I started by reading the abstracts of the 170 documents and excluded 70 that were not relevant for the scope of my work. From the 100 documents I was left with, I excluded two that were not in the areas of “Social Sciences”, “Economics, Econometrics and Finance”, “Business, Management and Accounting”; and also excluded one book. Then I excluded documents which sources were not Journals or Reviews related to business, economics and finance and I was left with 70 documents. I proceeded to refine my search to include only those documents with the keywords:

Predatory Lending; Subprime and Predatory Lending; Mortgage Frauds; Lending Behaviour; Lending Practices; Predatory Lending and Borrowing; Financial Ethics. I was left with 33 documents.

From those, I was able to download 24 documents from Scopus and excluded one of them because it was an introductory article with only 3 pages. In the end, I was left with 23 documents that I list in Annex I. There, I include a table with the following information about the articles sorted by date from the most recent: authors; publishing year; source; title; countries studied; countries of the authors; number of citations in Scopus; the most relevant keyword for choosing that article; methodology; authors' affiliations (academic or non-academic); and results. This way, it became much easier and accelerated the interpretation of the data.

Then I thoroughly reviewed each of the articles and elaborated the chapter "Results". After synthesizing the information about the selected articles on the subchapter "Analysis and Discussion of Results", I have drawn the main Conclusions that I expose on Chapter 5 of this work.

# 3. Presentation of the theme "Predatory Lending"

Predatory lending can be defined as the imposition of "unfair and abusive loan terms on borrowers, often through aggressive sales tactics, or loans that contain terms and conditions that ultimately harm borrowers" (Agarwal et al., 2014, p. 1), a definition that is common to the one given by the US Government Accountability Office (2004) and by the Federal Deposit Insurance Corporation (FDIC, 2006). Bond et al. (2009) define predatory loans as loans that would not be taken by potential borrowers if they had the

same information as lenders, and are usually unaffordable, being the objective of the lender to seize property.

Subprime mortgages were not a new product at the beginning of this century, nor were new complaints about subprime loans. “Since 1993, the HUD has been compiling a list of lenders who specialize in subprime mortgage lending. About 700,000 mortgages were originated annually between 1998 and 2000 by lenders whose primary business was originating subprime loans” (Mayer et al., 2008, p. 2). But at the beginning of the century, things would acquire a greater proportion.

One of the examples of the practice of predatory lending was the encouragement of home loans to people who could not afford them. Unsuitable loans were made without adequate determination and documentation of creditworthiness. Lenders in return charged a higher interest rate. That was a way to get people quickly into mortgages. From 2000 to 2007, low- and no-doc loans rapidly and unexpectedly increased “from less than 2% to roughly 9% of all outstanding loans” (The Financial Crisis Inquiry Commission [FCIC], 2011, p. 110). Eventually, the lender knew that loans could not be repaid and would likely ruin the borrower and cause massive losses to investors in mortgage securities. Creditworthiness was judged not on the basis of a borrower’s ability to repay but on the value of the collateral. This was predatory because the lender was making a loan with the intent of seizing property when the borrower defaulted. Such loans were merely devious ways of acquiring property, what seemed good for the lenders as long as loan-to-value (LTV) ratios protected their investment. But lenders were just betting that home prices would go up forever.

Moreover, important terms of loans were concealed or disguised or otherwise not made known, especially to unsuspecting and unsophisticated borrowers who could not evaluate the loan’s conditions. If lenders educated naive borrowers, they could forfeit

profits. Some of these consumers were not even able to make their initial payments because the terms were far worse than what the brokers had initially sold them.

Another shift that had serious consequences was the regularity of loans with LTV ratios above 80%, what once was rare. There was a special attraction for lending huge sums of money to poor immigrants. We also had the case of the so-called NINJA loans where borrowers had no income, no job and no assets. There was no credit check before the loan approval, and these people had no capacity to make a down payment so the lender just loaned 100% of the house purchase price. The industry itself started calling "liar loans" to these kinds of predatory mortgages.

Another predatory practice was to induce borrowers to refinance unnecessarily into new loans repeatedly. This way the lenders collected additional fees in a process known as "flipping". But who were these borrowers? Who were these unscrupulous people? Some of them were recent graduates, others had been flipping burgers, but this was a field that even employed ex-convicts. This was a fertile land for fraud to flourish.

As was expected, appraisers felt pressed to inflate the value of homes. The pressure could come from many sides including mortgage brokers. And the activity of appraisers was barely supervised.

A great pool of money attracted envious eyes. New lenders entered the field. Investors wanted more mortgage-related securities and borrowers wanted mortgages. The volume of subprime and non-traditional lending rose sharply. All this predatory lending resulted on the nearly doubling of mortgage defaults "from the summer of 2006 to late 2007" (FCIC, 2011, p. xxii). The number of suspicious activity reports related to mortgage fraud more than doubled between 2005 and 2009. It had already grown 20-fold between 1996 and 2005 (FCIC, 2011).

Since the late 1990's, consumer advocates started raising the issues of predatory lending and of homeowners that could not afford to pay their mortgages, with the Federal Reserve and other banking regulators. A government report was made on the sequence of these complaints, but the report did not fall in the gusto of the Congress, no measures were taken and the problems persisted. The status quo changed little. Even the traditional banks started to feel competitive pressure from the non-traditional lenders and also increased their overwriting of poor-quality loans. The regulatory agencies refrained from using the legal system to rein in predatory lenders, they failed what was expected of them and didn't stop the meltdown of the financial system.

# 4. Results

Many Reviews and Journals published articles on the topic of predatory lending, but from the 23 documents I have selected, 13 were published by *Housing Policy Debate*, what corresponds to 57% of the sample of articles. From my selection, the years with more documents published were 2004 with 6 articles (26% of the articles), 2007 with 4 (17%), and 2013 with 3 articles (13%). The number of relevant documents written some years before the collapse of financial markets shows that predatory lending was not a new problem and that it had been investigated by researchers for several years. The greatest share of these articles was published in the USA with 21 articles. About the country studied, the USA is the country most studied, with all the 23 articles making reference to the practices of predatory lending in that country. It is understandable because the USA was the epicentre of the crisis. Of the articles selected, "predatory lending" was the most important keyword influencing my choice of 13 articles, mainly from 2007 forwards. Keyword "subprime and predatory lending" was the most influent in the choice of 10 articles, that were mostly published until 2007.

I verify that 11 articles were written by only one author, 6 documents were written by two authors, and 6 articles were published by three or more authors, so more than half were written in co-authorship. Of my selection, Kurt Eggert and Wei Li are the authors that contributed with two documents. The others contributed with only one.

12 documents were written by academics, 6 articles were written by non-academics, and the remaining 5 were published by a mix of academics and non-academics which can mean that there was a cooperative relationship between researchers from different backgrounds. About methodology, most of the articles involve a quantitative study, namely 15 articles, while the remaining 8 documents only include a qualitative analysis. All the articles written by a mix of academics and non-academics involve a quantitative methodology. From the articles that only involved a qualitative methodology, they were predominantly written by academics, namely 6 documents, while the other 2 were published by non-academics.

The most cited articles are, according to Scopus: “The sociology and geography of mortgage markets: Reflections on the financial crisis” (2009) with 84 citations written by Manuel Aalbers that brings his perspective as a sociologist to the then peaking crisis; “Measuring the effect of subprime lending on neighbourhood foreclosures: Evidence from Chicago” (2005) with 75 citations that is an important article among many that analyse racial discrimination in lending practices; “Neighbourhood patterns of subprime lending: Evidence from disparate cities” (2004) with 64 citations. On the present decade, the most cited documents are: “Racial Dynamics of Subprime Mortgage Lending at the Peak” (2013) with 28 citations, once again analysing racial discrimination; “Predatory lending and the subprime crisis” (2014) with 20 citations. This last one is the most recent article I analyse in this work.

## *4.1 Legislation effects on halting predatory lending*

Agarwal et al. (2014) analyse a pilot program that was executed in an area of the city of Chicago on the end of 2006 and beginning of 2007. Despite being planned to last for 4 years and then extended to other areas, this program stopped due to the pressures of not only real estate investors and mortgage originators, but also of community activists that feared the prices of the houses would fall due to that legislation. That program involved legislative measures to fight predatory lending practices. The authors analyse data from various sources and contrast the data gathered from the target population with the data gathered from a control sample that was composed by neighbour areas inside the city of Chicago.

The researchers find that about "half of the state-licensed lenders exited the pilot zip codes, more than double the exit rate in the control areas. The remaining lenders made fewer risky loans and originated credit to borrowers with higher credit quality" (Agarwal et al., 2014, p. 2). This research finds that predatory lending practices were reduced because of the influence of legislation, by driving predatory lenders out of the market, but no effect was seen on mortgage default rates for those lenders who stayed in the market. They conclude that the exiting of state-licensed lenders was the factor that improved loan performance.

Garrisson and Li (2011) try to determine if refinancing brought a "net tangible benefit" to borrowers or not. It is very difficult for a borrower to decide whether to enter into a refinancing or not, due to the complexity of variables she must take into account. Garrison and Li use NMDR – National Mortgage Data Repository – information that contains relevant documentation not usually accessible to researchers, such as the application forms to loans, the closing statements, payments on previous loans and transaction fees. They try to show that the methods that were being used by public authorities were not enough to determine "net tangible benefit" to borrowers. They

propose as an alternative an analysis of the net present value of refinancing to the borrowers and discuss how that can contribute to policy measures. They complete their study by analysing government intervention on the refinancing issue.

Garrison and Li (2011) concluded that loan contracts had many pitfalls. Also, “over the past decade, many states have passed legislation designed to protect borrowers from loan flipping and equity stripping” (Garrison & Li, 2011, p. 5) and the Consumer Financial Protection Bureau (CFPB) was created. Since it is difficult to define what is “net tangible benefit”, the authors propose that an extensive benefit-cost analysis is used, so CFPB can get value from their results and try to apply their methodology, since this was the first paper to use NMDR data and it identifies red flags that government authorities should take into consideration when passing new anti-predatory laws. Garrison and Li finish by suggesting that net present valuation can be useful and even central to the proposal of new regulations.

Goodman and Smith (2010) use state variations in foreclosures, “static and dynamic demographic information to control for economic variations and location fixed effects […] to determine the political and locational drivers of default” (Goodman & Smith, 2010, p. 2). The authors use the hypothesis that if the lenders face fewer costs associated with foreclosures they will have more liberal standards in providing loans; that if the costs to borrowers from defaulting are lower than those costs are higher to the lenders;

*the increased incentive on lenders to tighten underwriting standards influences the rate of foreclosures across the market. […] we incorporate legislative controls for both predatory lending and foreclosure execution in order to gauge the impact they have on the extent of default*

In Goodman & Smith (2010), p.5.

Many states had been adopting anti-predatory legislation since the late 1990s. Goodman and Smith (2010) get to the conclusion that lenders and borrowers could both benefit from government initiatives to reduce the number of mortgage foreclosures. If the burdens imposed on lenders for foreclosures increase, then they will improve their mortgage writing standards and this self-restraint would rationalize the mortgage credit market. This study suggests that state legislation can have a beneficial effect on the number of foreclosures and that state-level intervention should contribute to the discussion of measures to be adopted at the general government level. Higher foreclosure costs to lenders are associated with an inferior number of foreclosures.

Bond et al. (2009) also scrutinize possible consequences of regulatory intervention. They use a model to evaluate the effects of then recently proposed legislation to protect borrowers from predatory lending. To the authors, politicians face the challenge to pass legislation that cuts lending practices that reduce welfare but without hurting those credit allocation practices that increase welfare. If predatory practices were eliminated, then lenders would only be left with the option to refinance prime borrowers. This way subprime borrowers would be less vulnerable to dishonest practices by lenders but lending volumes to them would also shrink. Some legislation passed proposed to restrict prepayment penalties and balloon payments for example. Prepayment penalties would have to be paid if a borrower wanted to refinance with a new lender. This way, this kind of legislation favours competition and reduces the effects of predatory lending. Balloon payments are large percentage payments left to a future amortization of the loan. Since many borrowers don’t have the money to make that payment, they will require to refinance and, in this case, the lender can use his monopolistic position to pressure the borrower to accept predatory conditions. Legislation against these two practices doesn’t have its effect at the beginning of the loan but later when it withdraws power from the lender over the borrower.

Li and Ernst test the consequences

*of 33 state predatory lending regulatory regimes on the flow and cost of subprime residential mortgage credit […] to determine whether state laws are having their intended effect of decreasing the prevalence of loan terms targeted for reform without diminishing the overall number of loans or giving rise to undesirable increases in costs*

In Li & Ernst (2007), p. 2.

The researchers set two models. With the first, they try to determine if the newly introduced legislation had the desired effects on reducing the targeted terms and test the effect on the volume of loans with fair conditions. The second model examines the effects on the costs to borrowers of the passing of those legislations. Li and Ernst (2007) find that the number of loans with targeted terms decreased while the number of subprime loans with fair conditions increased. Also, the authors find that costs to consumers decreased. Their study suggests that financial institutions did not face substantial costs in complying with new legislation. "These results strongly support the conclusion that policy makers have succeeded" (Li & Ernst, 2007, p. 44).

Engel & McCoy (2004) explain how investors in mortgage-backed securities (MBS) can protect themselves from the risks of predatory loans' backed securities by legal protections. The authors propose that legislation must be passed to make investors liable so that they audit predatory lenders and get away from investing on MBS that include predatory loans. Secondary markets' participants have the technology and are better positioned than borrowers to make the necessary due diligence and police the practices of predatory lenders. The authors advocate the need for a balance between the necessity to audit predatory lenders practices with the need to keep mortgage credit flowing to low- and moderate-income neighbourhoods. Otherwise, securitization could restrict itself to prime loans and stop the flow of funding to the subprime market.

White (2004) suggests policy responses to predatory lending. If higher interest rates were adequately charged to cover higher credit risks, it could be inconvenient to police that practice because it would constrain lending to riskier borrowers. But his study finds that, besides covering credit and other risks, the charge of higher interest rates has a dishonest component and in this case it is adequate for authorities to pass legislation. The researcher proposes that dishonest pricing could be directly regulated. Even if subprime risks could be efficiently covered by higher interest rates, society as a whole and individual borrowers should be concerned with the practice of lending to very risky borrowers. "High-cost, high-risk lending results in both a substantial transfer of wealth from low-income borrowers to wealthy lenders and investors and in the serious consequences of default and foreclosure for individual families that are on the wrong end of the risk" (White, 2004, p. 27). So the efficient pricing of high-risk lending is not the only concern for regulators. They should also take into consideration social costs of efficiently priced loans to very risky borrowers that may fall victim of predatory lending.

## *4.2 Discrimination of minorities and underprivileged classes*

Redlining is a practice in mortgage markets to not lend money to non-whites or in minorities neighbourhoods, and Bedford-Stuyvesant was no exception. Botein (2013) questions how the financial institutions passed from that kind of practice into predatory loans in that New York City black neighbourhood. The consequence of the growth of subprime lending in Bedford-Stuyvesant was the growth of foreclosures later on. The author uses both quantitative and qualitative methods including interviews with homeowners to understand their reasons on taking subprime loans, and how they were affected besides facing foreclosures.

These people resorted to subprime lenders because they had a negative self-image of credit quality and thought that traditional lenders would redline that area. In practice, those that had tried to get loans from traditional bigger banks had been redlined. Botein

(2013) gets to the conclusion that usually people realized they were falling into a trap by accepting predatory conditions but they thought it was the best option for them because either traditional lenders had redlined their neighbourhood, or because brokers had established themselves in their communities' social circles.

Faber (2013) analyses race and segregation on the approval of loans and on the determination if loans should be prime or subprime. Particularly, the author studies how wealthy non-whites felt victim of predatory and subprime lending practices. He studies how much likely was a Black to be denied a loan compared with a white and, if approved, how much likely it would be a subprime than a prime loan. The author concludes that:

*Black home purchase mortgage applicants were 2.8 times more likely, Latinos 2.0 times more likely, and Asians 1.1 times more likely to be denied a loan than whites were […] If approved, blacks' and Latinos' applications were also 2.4 times more likely to result in a subprime loan than whites' applications.*

In Faber (2013), p. 15.

The objective of Immergluck & Smith (2005) is to find a good measure of the influence of subprime lending on neighbourhood foreclosure levels. The authors start the explanation of their results by exposing that between 1995 and 2002 foreclosure starts rose 238% on the geographic area studied. The authors find very relevant differences between different racial neighbourhoods. They registered an increase of 544% in foreclosure starts on communities where the population was 90% or more composed of racial or ethnical minorities. It was in minorities neighbourhoods that foreclosure starts were more felt, especially older minority neighbourhoods. They suggest that in neighbourhoods where the number of Blacks is growing "subprime lending explains roughly two-thirds of the greater levels of foreclosures" (Immergluck & Smith, 2005, p. 25).

Calem et al. (2004) objective is to estimate how can race, ethnics and neighbourhoods influence the probability of getting a subprime loan. They examine lending practices in seven major cities separately in 1997 and 2002 and then compare the results to study the evolution of the mortgage market. The authors "examine the relative likelihood that a conventional, refinancing loan is subprime in relation to a variety of neighbourhood demographic and economic variables [and] the interaction between neighbourhood and individual borrower demographic classifications" (Calem et al., 2004, p. 3).

Calem et al. (2004) find that subprime lending is negatively related to the neighbourhood educational level, to the borrower income and to the median neighbourhood income. In contrast, subprime borrowing is positively related to neighbourhood credit risk and to the share of minorities' people in communities, more significantly black populations. The results for other races are mixed. One surprising finding is that even if an applicant is white, the probability of getting a subprime loan increases if the house is in a black neighbourhood. While the authors state that their results cannot serve as a conclusion of the existence of racial discrimination in mortgage lending, they call for the need to pay attention to potentially discriminatory practices.

According to Renuart (2004), high concentrations of subprime lending were found in minorities communities, and previous studies concluded that Blacks and Hispanics that could have applied to prime loans were many times steered to subprime loans. Predatory lenders usually target low- and moderate-income borrowers, women and older homeowners. Predatory lending practices include targeting people who are not even searching for loans, including older and minority homeowners. Transparency and true understanding of the mortgage terms by borrowers were rare. The settlement of the contract demanded 20 to 40 signatures by the borrowers and many had a low financial literacy. Closing terms often differed from what they were told they would get and differences were not small. In minority neighbourhoods, equity stripping had larger

negative consequences and “wealth-building capacity of blacks and Hispanics may be permanently eliminated” (Renuart, 2004, p.20).

Borrowers in the subprime market “are disproportionately minority and lower income, older, less well educated, less financially sophisticated, and less likely to search for the best interest rate when applying for a mortgage” (Lax et al., 2004, p. 2). These authors also find that subprime borrowers felt less in control of their finances and were uncomfortable dealing with banks, and experienced more life disruptions such as major medical expenses, unemployment and major decreases in income.

## *4.3 Neighbourhood consequences of foreclosures*

Botein (2013) analyses the larger effects of foreclosures on the community of Bedford-Stuyvesant. She also discusses ways to manage the problems faced by the community, namely how to get past the increasing number of people having difficulty paying their debts, and remarks that foreclosures are not the only negative consequence of subprime lending, but that people can be affected in other ways.

Botein (2013) finds that the distress faced by people in this community goes much beyond foreclosures. This was because homeowners faced many financial accumulated risks and had to devise strategies to stay out of poverty. People even started trying to get loans from even more predatory lenders like “loan sharks, payday lending, and tax refund anticipation loans” (Botein, 2013, p. 20). The researcher makes an interesting discovery that most of the foreclosure filings applied to recent homeowners on that area. Those that had bought their houses decades before, despite also being targeted by subprime lenders to refinance on their home equity, were more resilient in avoiding foreclosures. The choice of the lender or mortgage broker often depended on opinions they got from persons on their social networks, what had a negative effect in the community as a whole. Once a predatory lender could convince a member of the

community she had made a good business on getting a loan from her, the member would spread the word and others would be impaired by the same predatory lender.

Crump (2013) is an urban geographer that makes a qualitative analysis of the why's and how's of the foreclosures that stroke so many families throughout the USA and their consequences and meanings to communities. He centres his study on the metropolitan area of Minneapolis-St Paul, the so-called "twin cities". He studies subprime and predatory, even fraudulent, lending practices. Then he examines mortgage transactions on a sample of houses that went into foreclosure and were located in a community where the majority of people were Afro-Americans. He bases his qualitative analyses on interviews made to people on that community and finishes his work by giving his opinion on the different consequences of the housing bust to lenders and borrowers.

As mentioned by others, Crump (2013) also realizes that minorities were more affected by the housing crisis than whites were. The most noted consequences of the foreclosures were abandoned structures, health problems and relationships affected. All ended up having neighbourhood implications like "arson, and stripping of valuable copper and other metals" (Crump, 2013, p.9). The author finds that a stronger sense of personal responsibility emerged on the borrowers' side, what can indicate that ethical and moral codes are not the same in the side of the financial institutions that locked in the profits during the boom times and then beneficiated from the bailouts while "millions of borrowers unjustly lose their homes and economic security as well as their physical and mental health" (Crump, 2013, p. 15).

When defaults are highly concentrated, they can damage neighbourhoods (Quercia et al., 2007). This destabilization was most felt in neighbourhoods of minorities, of people with low-income and of elders that were the groups most targeted by predatory lenders. Foreclosures result not only on the losses of homes and wealth, but also on individuals

being hurt in their credit rating and reducing their capacity to get a rented house, new credit, insurance, or even a job. All this was complemented with psychological damages.

Renuart (2004) finds that foreclosures have negative consequences not only to the families but also to their communities and cities who start losing from vacant and then vandalized houses that decline in value and consequently fewer property taxes are collected.

## *4.4 Households' cognitive limitations*

Nofsinger (2012) studies the behaviour of households during the boom and then bust times, and investigates how changes in social norms and culture might have led to the financial crisis and how this changes influenced household behaviour during and after the crisis.

Due to psychological bias and rationality limitations, households' behaviour during a boom tends to have a pro-cyclical effect and to have a positive influence on the emergence of speculative bubbles. It is easier to get into debt during boom times, so households use the leverage that will turn against them during bust times. When things go wrong they sell low their assets and become more interested in saving, amortizing their debts and consuming less, what will once again have a pro-cyclical influence in the economy. When we have good times, people will not pay attention to the pressure financial institutions exert on politicians and deregulation will gain momentum and aggravate speculative bubbles. But when bad times come, the public will then pressure the politicians for more regulation. But further regulation can impede the economy from recovering at the desired pace.

There is the view that financial institutions and predatory lenders can benefit from consumers' limited rationality and psychological bias, with product design and marketing strategies, for example they can create loans "and application processing

programs that specifically feed into these biases in order to take advantage of imperfectly rational clients" (Nofsinger, 2012, p. 6). They can do this because people have problems with dealing with too much information that is usually complex if we're talking about loans and financial instruments. Also, the author considers that people usually suffer from optimism and short-term bias when estimating future costs. Another predatory strategy is finding those borrowers that are already facing difficulties and many lenders specialized on this. Those stressed borrowers would not use their full rationality in analysing the loan terms proposed by lenders.

Bond et al. (2009) simulate a situation where there are one borrower and one lender. In this monopolistic analysis, they assume that the lender has an informational advantage over the borrower, and this asymmetry of information is the most important factor for the lender to propose a refinance in predatory conditions. The authors consider how that information asymmetry influences the subprime market. They demonstrate that information asymmetry is the core originator and can explain time and spatial distribution of predatory lending practices. They conclude that the increase in credit supplied due to information asymmetries reduces social welfare, and that competition between lenders is beneficial to borrowers because it reduces predatory lending.

## *4.5 Securitization*

According to Aalbers (2009), the objective of financialization is to accumulate wealth through financial markets instead of production and trade. With financialization, loans are treated as financial assets. Securitization makes the link between the originators of loans and the investors in stock markets all around the World. Subprime and predatory lending were necessary to keep the machine of securitization running. This model, called "originate-to-distribute", gained monstrous proportions. Financialization allied with globalization was the vehicle that turned a mortgage crisis in the USA into a worldwide financial crisis. The housing bubble allowed many consumers to take big loans on their

houses' equity. But this was a circle. It was the easy credit that allowed people to buy more homes, what consequently raised their prices allowing borrowers to take even greater loans. It was a self-feeding mechanism. Where did lenders get the money to finance the mortgage market? From securitization. If brokers and lenders could charge a higher interest rate, then they would promote a higher yield on the mortgage-backed assets they securitized and would receive more generous fees. To charge those higher rates they had to start lending to riskier borrowers and increase refinancing.

Securitization can limit mortgage servicers' abilities (an explanation of mortgage servicing will follow on subchapter 4.7) because of contradictions on their fiduciary duties to "investors holding different tranches of securitized pools" (Eggert, 2007, p. 2). Sometimes these conflicts don´t completely block loan modifications but delay the process. For example, there are many investors who invest in derivatives that will be profitable if the housing market collapses and foreclosures start to rise. Banks that sell those derivatives and assume the counterparty risk should be precluded from modifying loans to prevent them going into foreclosure with the goal of not having to assume losses in derivatives contracts. Since there are many diversified investor interests in securitization, loan modification becomes less effective.

Renuart (2004) explains the characteristics of predatory loans from the initial phase of marketing to the closing phase of securitization and beyond. She ends up by explaining how the various actors get their profits on this process and their incentives. Lenders pay fees directly to brokers. Predatory lenders get exceptional profits from charging higher than competitive interest rates and fees and selling loans on the secondary market. Securitization is the fuel that keeps the subprime machine running and each of the participants in this process gets its share of the profits that are ultimately borne by borrowers. The investors provide the income that flows to lenders and allow them to generate more predatory loans. Those loans' mortgage payments will be the return of

investors and cover the costs of securitization. Money goes back and forth between lenders and investors and predatory lending sustains itself this way. In the end, wealth is transferred from middle- and lower-income families to predatory actors.

Engel & McCoy test if predatory lending can be halted by secondary markets discipline. They explain how investors in MBS might suffer the consequences of predatory lending due to information asymmetries, chronicle the risks that securitization is exposed due to predatory lending, and how they can be managed. The researchers question if efforts to protect investors in MBS also avert abusive lending practices. Since the lenders collect their fees up front, securitization might be a way to secure their profits and pass the risk to investors, what may reduce the incentive for lenders to be rigorous when analysing the credit rating of applicants. Which risks do MBS investors face? They face credit risk which is inflated with predatory lending due to the lack of capacity of borrowers to pay their loans; prepayment risk that can be exacerbated by the practice of refinancing loans many times that is also predatory and damaging to borrowers; litigation risk because investors can be affected by lawsuits against the trusts that own the securitized loans. "The challenge for the secondary market over the past decades has been to structure securitization deals to reduce these risks to investors" (Engel & McCoy, 2004, p. 15).

Securitization uses due diligence and credit enhancements to manage credit risk. Prepayment risk can be dealt with by applying heavy penalties to borrowers when they prepay but studies have shown that investors took exceptionally great profits in detriment of borrowers that were harmed. Litigation risk is managed by introducing terms to avoid investors liability on the loan originations. This risk proved to be quite small "because there are practical impediments to bringing predatory lending claims and also because securitization deals are intentionally structured to reduce such risk" (Engel & McCoy, 2004, p. 25). Those who usually invest in the senior tranches of MBS have little incentive to demand the curbing of predatory lending. The researchers get to the

conclusion that none of the shields described in their article is good enough to reduce predatory practices because investors are protected by many mechanisms so they don't feel enticed on pressing originators to stop predatory lending practices. In the end, borrowers are the only ones that are injured by predatory practices while investors, in fact, benefit from it.

## *4.6 Steering prime borrowers into subprime loans*

On the mortgage market lenders have to specialize in a segment, prime or subprime. The results of Nichols et al. (2005) suggest that credit indicators influence the borrower being sold a prime, FHA (Federal Housing Administration) or subprime loan. Measures of credit risk such as credit history, "income, non-real estate debt, and value constraints" (Nichols et al., 2005, p. 20) play an important part in the choice of which category the loan will fall into. The researchers make sensitivity tests and find that no single characteristic would be determinant for a borrower to choose to apply to a subprime loan. She would only apply for this category of loans if there were more than one very negative indicators.

White (2004) discusses if the high interest rates and fees charged on the subprime market are adequate to the level of subprime borrowers' risk or are excessive. Higher costs are supposedly charged to cover higher credit risk and other risks from lending in the subprime market. One of the conclusions White (2004) finds is that many subprime market borrowers had the credit quality to apply to prime loans. When pools of securitized loans were studied, many borrowers with prime credit rating were found in subprime pools of loans. The author finds that, while in the prime market the pricing is usually tabulated, in the subprime market there is a great dispersion of pricing that may be "based on information asymmetry, search costs, seller obfuscation, product differentiation, and principal-agent problems" (White, 2004, p. 19). Lax et al. (2004) also reach the conclusion that subprime mortgages exhibit higher disparity in pricing.

Lax et al. (2004) question if the subprime market is efficient in charging higher costs or predatory. To assess the efficiency of the subprime market, the researchers start by trying “to more systematically determine the role of risk in explaining why borrowers end up in the subprime market” (Lax et al., 2004, p. 25). Then they consider the differences of interest rates between the two mortgage markets to verify if they can be elucidated or not by differences in credit risk only. Lax et al. (2004) study validates that borrowers in the subprime market pay higher rates than those in the prime market mainly due to risk related causes, but other factors contribute to that difference such as demographic characteristics, knowledge, financial sophistication, being turned down by a lender and responding to an offer of guaranteed loan approval. Additional risks faced by subprime lenders don´t entirely explain the higher costs they charge. Though the above mentioned cannot be considered definitive, evidence indicates that the subprime market operates less efficiently than the prime market. This conclusion that some borrowers might have got subprime loans because of factors other than risk is alarming.

## *4.7 De-regulation and other topics*

Garrison and Li (2011) find that people entered into cash-refinance loans to extract some equity of their homes that had appreciated in value for more than 20 years, getting the benefits from historically low interest rates. There were cases of people that had paid for vacations and luxury items with credit cards and were now trying to refinance with lower interest rates. So a housing bubble with constant appreciations in value allowed them to live above their possibilities. On the other side of the deal were lenders that were trying to make the greatest profit from these transactions and for that purpose counted on the complexity of the information that made it difficult for the borrowers to understand if the transactions were beneficial to them.

Aalbers (2009) discusses the origins of the crisis. He considers that subprime and predatory lending was an important cause for the financial crisis but not the original

problem. He brings to the attention that prior causes encouraged subprime mortgages: “(1) deregulation and re-regulation, (2) financialization and globalization, and (3) bubbles and wrong incentives” (Aalbers, 2009, p. 2). Deregulation opened the doors to non-traditional lenders to enter the mortgage market. These non-traditional lenders were subject to weaker forms of regulation “and could therefore provide riskier loans without being monitored” (Aalbers, 2009, p. 3). Many times there were confusions between state-level and national level institutions about who should supervise what, and these institutions also failed to exercise their powers of supervision and regulation.

In the USA there is a dual banking system where banks can apply to be supervised at the state or national level. This decision will influence not only which agencies will supervise a bank but also which practices are allowed, and regulations that it has to submit to. Nationally supervised banks don’t have to submit to regulations pre-empted by the Office of the Comptroller of the Currency (OCC). Whalen (2008) studies if these pre-emptions give national banks any kind of advantage over state-level supervised banks. Whalen appraises

*the wealth and risk effects attributable to a series of pre-emption announcements by the OCC. The expected effects of the announcements are inferred from changes in the return generating process for portfolios of target firms on event dates when the agency disclosed relevant new information about their pre-emption decisions to the market*

In Whalen (2008), p. 6.

Whalen gets to the result that “wealth increased significantly only for small, geographically diversified national banks. Pre-emption did not significantly reduce state bank wealth and insignificant differences in excess returns are found when similar national and state banks are compared” (Whalen, 2008, p.1).

Rose (2008) considers that it is too simplistic to say that foreclosures derived from a specific or a combination of predatory lending practices. For example, one might think that low- or no-doc loans should be positively correlated with foreclosures, but only on refinances it was observed that this characteristic positively influenced foreclosures. If public authorities wanted to take this into account, they could pass legislation to require more documentation in refinancing loans.

Mortgage collection is usually not accomplished by the originating lender but by a mortgage servicer that is hired by the trustee to assemble payments and manage the mitigation of losses in case the borrower defaults, for example by foreclosing. Eggert (2004) focuses on the servicing of residential mortgages namely how it affects borrowers "and what market and government forces are in place to prevent abusive behaviour by servicers" (Eggert, 2004, p.3). This article describes various opportunistic practices by mortgage servicers, discusses their causes, presents a case study of a servicer that adopted unscrupulous practices and examines how government and market actors can react to those practices. Servicer practices can be considered abusive when servicers obtain or try "to obtain unwarranted fees or other costs from borrowers, engage in unfair collection practices" (Eggert, 2004, p. 5) or make anything to cause the borrower to default or go into foreclosure.

The author finds various abusive practices and that some borrowers went into foreclosure not because of their actions but due to the unscrupulous behaviour of mortgage servicers. The researcher presents the case study of Fairbanks Capital and provides conclusive evidence that some servicers, in fact, harmed borrowers with their abusive practices. Servicers have the capacity to engage in this unscrupulous behaviour because borrowers don't have the opportunity to choose nor the capacity to control their services. "Legal sanctions against specific misbehaviour are provided by contract or by public law, such as consumer protection laws enforced by consumers themselves

or by various public entities" (Eggert, 2004, p. 17). Even when laws are passed, borrowers have difficulty in enforcing those laws. For servicers to act ethically, other actors must intervene due to the lack of power of borrowers in this relationship. To limit opportunistic practices, states have passed legislation but for the author, he concludes, it doesn't seem to be enough and more and new regulation is needed.

Stegman et al. had written an article about the crescent importance of servicing and loss mitigation. Discussing that article, Eggert (2007) tries to identify the barriers to effective loss mitigation methods that could reduce foreclosures progression. The author starts by pointing out that preventive servicing can be of no help to borrowers who could not afford the loans in the first instance. Eggert writes this article in a time when subprime foreclosures had already started to rise and people were asking for more protection to borrowers including a reduction in subprime loans and stricter underwriting standards. Several barriers present to the work of servicing providers. Self-interest could reduce the celerity with which a servicer would modify a loan. This involves "abusive practices designed to increase their income to the detriment of borrowers" (Eggert, 2007, p. 10). Even if they don't engage in abusive practices, servicers might slow down the process of borrowers becoming current because a portion of their income depends on late fees. Tax laws and accounting standards applying to securitized loans can also constitute barriers to loan modifications.

Refinancing can even be harmful to borrowers. If they refinance, they still face the risk of failing the new payments established and going into foreclosure. This way, they would have only delayed foreclosure and stripped more equity on their houses besides losing defences they might have had in the initial loan. Sometimes lenders and servicers demand borrowers to waive claims against them when the loans are modified and therefore borrowers lose "the ability to obtain full relief from a predatory loan" (Eggert, 2007, p. 8). Eggert concludes the paper by stating that "Creating a best practices

standard for subprime servicing requires an understanding of which practices are most likely to cure defaults and which cures will last" (Eggert, 2007, p. 15).

Mews & Abraham (2007) make a religiously based analysis on the difference between usury and interest (just compensation) and how usury can be compared to predatory lending. Usury is a word no longer used in finance and it is hard to include it in legislation. The charge of interest is considered normal and should depend on market forces. What we must worry about in modern finance ethics is with predatory lending, as opposed to just compensation, because the first involves practices by lenders who ultimately know that the borrowers won't have the capacity, or will have great difficulties to pay their loans back. Mews & Abraham (2007) suggest that ethics is necessary for the relationship between lender and borrower and religious traditions can have a word to say on that relationship, as happened in Socially Responsible Investment by mutual funds.

## *4.8 Analysis and Discussion of Results*

The sample is composed of 23 articles and 15 of them clearly consider that predatory lending was an important cause to the financial crisis of 2007-2009. The others don't deny it but don't give the same relevant importance. So, 65% of the articles I analyse confirm my initial hypothesis that, despite not being the most relevant cause, predatory lending clearly contributed to the crisis.

Legislation was found to have positive effects on halting predatory lending practices on 8 articles (35% of the sample). Discrimination of minority communities in lending practices is a theme approached in 7 articles (30%) that found evidence of that discrimination. Negative consequences of foreclosures on neighbourhoods, besides individual costs, were presented in 6 articles (26%).

In 5 articles (22%) the authors explain that underprivileged classes are the most exposed to predatory lending; in 4 articles it is made relevant that households' cognitive bias and

limitations favoured predatory lending practices; in 3 articles it was found that borrowers that had conditions to apply for prime loans were thrown to subprime lending; and in 2 articles the researchers got to the conclusion that securitization played an extremely important role in fuelling predatory lending and, ultimately, in causing the financial crisis.

Agarwal et al. (2014) conclude that predatory lending can contribute to high default rates, but it was not the sole contributor to the financial crisis and might not even have been an instrumental one, but only the first link in the origination of mortgages that would then be securitized by the following links of the chain. On the origins of foreclosures, people revealed to Crump (2013), were usually risky loans, health issues, unemployment and relationship problems such as divorce. Garrison & Li (2011) find that refinancing practices were usually predatory and abusive by the part of lenders, and the authors indicate that their methodology can be generalized to the general mortgage market besides the cases they simulated. Immergluck & Smith (2005) find an increase of foreclosure starts on prime loans, what is natural because the number of prime loans was increasing, but that effect was proportionally much stronger on subprime loans, and the difference assumed great proportions. For example, “in the case of home purchase loans, the subprime coefficient is more than 28 times as large as the prime coefficient” (Immergluck & Smith, 2005, p. 19). Rose (2008) concludes that the way predatory practices influence foreclosures is not straightforward and that he finds complex results in his analysis. “Subprime mortgage loans go into default and foreclosure at significantly higher rates than prime mortgage loans do” (Renuart, 2004, p.31).

Quercia et al. (2007) get to the conclusion that “refinance loans with prepayment penalties are 20 percent more likely and those with balloon payments are 50 percent more likely to experience a foreclosure than other loans” (Quercia et al., 2007, p. 2). They also find that, on average, foreclosures arrive one month earlier on loans with

prepayment penalties than on loans without that characteristic. Comparing adjustable rate mortgages and balloon payments' loans with fixed rate mortgages, the first two enter into foreclosure two months before on average than the latter.

Lax et al. (2004) statistics confirm that subprime borrowers are riskier and exhibit higher payment-to-income ratios than prime borrowers. Subprime lenders dominate the likely riskier market of refinancing and are more inclined to issue riskier loans.

Even after the closing of the loan, predatory practices continued such as offers to refinance the loan, placing monthly payments in incorrect accounts so that payments would not be timely charged and more fees and interest were collected, operating irrelevant property inspections and even fraudulently calculating interest (Renuart, 2004). The result of these practices was equity stripping for many borrowers, eliminating the value of their houses and leading to foreclosures. On the other side, lenders and holders gained from equity stripping, and securitization in the secondary market inflated those gains. Many times, after long periods of struggle by families to pay their predatory loans, they ended up losing their homes in foreclosures.

There was a theory that predatory lenders tried to impose subprime loan conditions on the upper middle class of non-white people, and Faber (2013) seems to confirm that. Though the conclusions appoint that way, Faber prefers to say that it is not clear that racial discrimination existed because other factors could also be contributing for that apparent discrimination. Mews & Abraham (2007) find that those from underprivileged classes are the most exposed to predatory lending practices.

Some authors conclude that the costs of foreclosures affect not only individual borrowers or lenders but whole communities. Bond et al. (2009) conclude that social welfare can be improved by reducing predatory practices even if loan volumes are reduced.

Some researchers, including Crump, arrive at the conclusion that there were different consequences between lenders and borrowers:

*Although lenders were provided bailouts, they have taken little, if any, responsibility for their actions leading to the housing crisis. In contrast […] homeowners are expected to satisfy mortgages that leave them in underwater homes with little or no hope of rescue. Borrowers are, therefore, made to bear the major cost of the U.S. housing crisis*

In Crump (2013), p. 3.

Some authors get to the conclusion that households' behaviour plays an important part in an economic crisis.

At the beginning of this century, the American dream was the dream of homeownership. The White House Administration and policymakers contributed for this by encouraging government-sponsored enterprises Fannie Mae and Freddie Mac to provide financing and securitization for the home mortgage market, and emphasized "on expanding homeownership in the United States, particularly among people and communities of colour" (Botein, 2013, p. 4), what facilitated predatory lending practices that were more felt on previously redlined minority communities. After a few years, widespread over-indebtedness created an abundance of defaults that reduced banks' capital, in a downward spiral that eventually became the biggest economic disaster in the lifetime of the large majority of living people.

Allied to predatory lending, other causes contributed for that financial disaster: defective corporate governance and risk management practices at financial institutions, including inadequate stress-testing of portfolios; housing bubble and lack of common sense in mortgages' market, the burst of which created enormous losses for homeowners and investors; loose monetary policy with low interest rates making it more advantageous to borrow than to save, and that offered prospects of great wealth

to those willing to take large risks in the stock market and the bubbling housing market, especially in high-risk mortgages; financial advisers encouraged customers to buy and sell securities in ways that did not contribute to the improvement of their financial situation; outdated regulatory framework applicable to the financial services industry, with regulatory lapses, and the regulators that had ample authority to constrain financial institutions from taking excessive risks did not do so; irrational compensation practices not linked to long-term profitability, and conflicts of interest caused by compensation structures that had an important portion of exotic and toxic financial instruments; credit rating agencies' failure to investigate the soundness of the securities they were rating.

# 5. Conclusion

The main contribution of this work is to synthesise the view of various academic and non-academic researchers on the comprehension of predatory lending and how practices related to it contributed to the financial crisis of 2007-2009. Since I analyse a sample of relevant articles written since 2004, this work can open the way for deeper investigation about this theme but also for a larger examination of other causes that also contributed to the crisis.

Though this work is not very ambitious in scope, due to space restrictions, the subject of predatory lending deserves the reflection of finance practitioners that can get conclusions from the results I analyse and discuss.

Effectively, predatory lending was one of the ethical failures on the offspring of the financial crisis. It was a practice that came from previous decades but had the most catastrophic consequences on the first decade of this century because of the number of foreclosures it caused and the consequent negative consequences on individual borrowers and communities.

Financial institutions should have a moral and ethical obligation to not engage on this kind of practices, and to respect the positions not only of their shareholders, whose interests are often forgotten in detriment of the short-term objectives of executives, but also of stakeholders and society as a whole. Corporate social responsibility has grown in importance in the last decades, and financial institutions should also feel obligated by it when making their decisions.

Financial institutions are already under the guidance of many laws, that restrict what they can do. Those laws are fundamental to their actions, but ethical principles should not be disregarded and should get priority above short-termism that is so many times characteristic of executives. To make socially responsible decisions something has to change so that we don't fall in a cycle of economic depressions caused by the excesses of prior bubbles. How to apply ethics on specific actions is a challenge to everyone, including to those who dedicate themselves to the study of Finance. CFA Institute is one of the organizations that contributes to elevating the issue of Ethics with its' affiliates and has a *Code of Ethics and Standards of Professional Conduct*.

That is why it can be important to incorporate Ethics in the management of corporations. The objective is to avoid the same mistakes of the past and the repetition of a crisis with the dimension of that occurred on 2007-2009. For society to keep trust in its rulers and in those who can influence most the markets, it is important to make the analysis of the causes of the latest great recession. Understanding those causes may enact governments to more rapidly and efficiently react in a similar situation in the best interest of their citizens and taxpayers.

Ethics can act as a STOP sign when certain risks are being faced, so I conclude that it is really necessary in our times and for the future. So it is positive that an institution like ISEG also gives lectures on this subject on the Master's in Finance classes. If lawmakers start to reflect more about Ethics, probably better laws will be enacted. But what is the

most important is to put Ethics into practice in current management decisions, so that better long-term results can be attained, instead of having a short-term perspective.

The key financial market function of accounting and auditing firms, securities firms, commercial and investment banks, supervisors, law firms, rating agencies and stock exchanges is to vouch for the integrity and quality of information, transactions, procedures and financial instruments on the basis of their reputation (Blommestein, 2006). This reputation has been seriously damaged by the investigations under which these institutions are, over and over again, being scrutinized. Repeated assaults on the integrity of markets have damaged trust in finance.

On the years preceding the 2007-2009 financial crisis, bankers were blinkered and acted so opportunistically to a self-destructive extent that brought on a financial crisis, influenced by a culture of arrogance, greed, excessive risk-taking and a lack of leadership. A downward shift in ethical standards, creative and questionable accounting with auditors' complicity, and bankers' social irresponsibility and even fraudulent behaviour in some cases, coupled with lightheaded, sometimes delirious, risk management practices facilitated by securitizations, derivatives and other complex financial transactions that generated phantom earnings or removed unwanted debts from balance sheets, ended up in a major crisis.

There was a rise in the share of mortgages with low or no documentation and a surge in early payment defaults. Because down payments were so small, when house prices declined, many borrowers had little or no equity in their properties and thus less incentive to repay their mortgages.

Government housing policies contributed to the development of a massive housing bubble and the financial crisis of 2008. The monetary policy of the Federal Reserve created conditions in which a housing bubble could develop. The Federal Reserve

realized far too late the systemic risks, i.e., risks that pose a threat to the financial system.

The collapse of the housing bubble began the chain of events that led to the financial crisis. Defaults and losses on the insured mortgages increased. Investors filed lawsuits, and court actions involved almost all major loan originators and underwriters.

The first of the biggest investment banks to fail was Bear Stearns. Later, Lehman Brothers' bankruptcy filing, with no government rescue, added to uncertainty and panic in the financial markets. Then policymakers feared contagion so they were unwilling to allow big financial companies to go bankrupt. A few days later, the Federal Reserve, with support from Treasury, rescued AIG.

But if we look back in history, we behold a circular phenomenon, returning repeatedly. Stock-market downturns bring to the surface unethical transgressions committed during the euphoria of the preceding booms, and booms are always followed by busts. Enron and Lehman Brothers were not just accidents, but probably scapegoats for the whole system that kept running the same as before. A philosopher supposedly said that those who do not remember the past are condemned to repeat it. I conclude that studying the 2008 credit crisis history is essential to avoid its repetition.

Only adherence to higher moral standards could have prevented many of the 21$^{st}$-century corporate scandals. Some alternative behaviours do exist, with positive role models such as socially responsible investment, the Co-operative Bank in the United Kingdom or the Triodos Bank from the Netherlands.

The pressures on people in finance today are immense, and the difficulty of succeeding, combined with the high rewards that are still possible, create great temptations for unethical, as well as illegal, behaviour. Just as necessary as good regulation, ethics in finance can balance the competing demands of business success and social

responsibility. High ethical standards provide the necessary link between rules and business behaviour. Only in this way can we be assured that high corporate governance standards are adhered to, and that trust in finance is restored.

# 6. Limitations and perspectives of future research

This work consists of a meta-analysis that tries to determine the relevance of predatory lending as one of the ethical failures on the offspring of the 2007-2009 financial crisis. This methodology is suitable to present a resume of perspectives by academic and non-academic researchers on this subject.

However, this methodology has its limitations, since I only used one database for my search (Scopus), what might reduce the sources of study since the articles could have been different if I had opted for another database. I limited my search to the keyword “predatory lending” and didn’t deepen my analysis of other causes of the financial crisis.

The articles chosen focused mostly on the USA mortgage market, so it remains to be done an analysis about predatory lending and other causes to the crisis that also affected European and Worldwide markets, and possible different consequences due to social, economic or cultural factors.

Other meta-analyses can be made on other causes of the financial crisis and the Portuguese case can also be discussed in future works.

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# Annex I

| # | Authors | Year | Source |
|---|---|---|---|
| 1 | Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., Evanoff, D.D. | 2014 | Journal of Financial Economics |
| 2 | Botein, H. | 2013 | Housing Policy Debate |
| 3 | Faber, J.W. | 2013 | Housing Policy Debate |
| 4 | Crump, J. | 2013 | Housing Policy Debate |
| 5 | Nofsinger, J.R. | 2012 | Journal of Financial Stability |
| 6 | Garrison, S., Li, W. | 2011 | Housing Policy Debate |
| 7 | Goodman, A.C., Smith, B.C. | 2010 | Journal of Housing Economics |
| 8 | Bond, P., Musto, D.K., Yilmaz, B. | 2009 | Journal of Financial Economics |
| 9 | Aalbers, M.B. | 2009 | International Journal of Urban and Regional Research |
| 10 | Whalen, G.W. | 2008 | Quarterly Review of Economics and Finance |
| 11 | Rose, M.J. | 2008 | Journal of Economics and Business |
| 12 | Mews, C.J., Abraham, I. | 2007 | Journal of Business Ethics |
| 13 | Li, W., Ernst, K.S. | 2007 | Housing Policy Debate |
| 14 | Eggert, K. | 2007 | Housing Policy Debate |
| 15 | Quercia, R.G., Stegman, M.A., Davis, W.R. | 2007 | Housing Policy Debate |
| 16 | Nichols, J., Pennington-Cross, A., Yezer, A. | 2005 | Journal of Real Estate Finance and Economics |
| 17 | Immergluck, D., Smith, G. | 2005 | Urban Affairs Review |
| 18 | Calem, P.S., Hershaff, J.E., Wachter, S.M. | 2004 | Housing Policy Debate |
| 19 | Engel, K.C., McCoy, P.A. | 2004 | Housing Policy Debate |
| 20 | Renuart, E. | 2004 | Housing Policy Debate |
| 21 | White, A.M. | 2004 | Housing Policy Debate |
| 22 | Lax, H., Manti, M., Raca, P., Zorn, P. | 2004 | Housing Policy Debate |
| 23 | Eggert, K. | 2004 | Housing Policy Debate |

| # | Article |
|---|---|
| 1 | Predatory lending and the subprime crisis |
| 2 | From Redlining to Subprime Lending: How Neighborhood Narratives Mask Financial Distress in Bedford-Stuyvesant, Brooklyn |
| 3 | Racial Dynamics of Subprime Mortgage Lending at the Peak |
| 4 | The Housing Boom and Bust in the Twin Cities |
| 5 | Household behavior and boom/bust cycles |
| 6 | The complicated transaction: Using net present value to weigh the costs and benefits of the cash-out refinance |
| 7 | Residential mortgage default: Theory works and so does policy |
| 8 | Predatory mortgage lending |
| 9 | The sociology and geography of mortgage markets: Reflections on the financial crisis |
| 10 | The impact of preemption of the Georgia Fair Lending Act by the OCC on national and state banks and the dual banking system |
| 11 | Predatory lending practices and subprime foreclosures: Distinguishing impacts by loan category |
| 12 | Usury and just compensation: Religious and financial ethics in historical perspective |
| 13 | Do state predatory lending laws work? A panel analysis of market reforms |
| 14 | Comment on Michael A. Stegman et al.'s "Preventive servicing is good for business and affordable homeownership policy": What prevents loan modifications? |
| 15 | The impact of predatory loan terms on subprime foreclosures: The special case of prepayment penalties and balloon payments |
| 16 | Borrower self-selection, underwriting costs, and subprime mortgage credit supply |
| 17 | Measuring the effect of subprime lending on neighborhood foreclosures: Evidence from Chicago |
| 18 | Neighborhood patterns of subprime lending: Evidence from disparate cities |
| 19 | Predatory lending: What does wall street have to do with it? |
| 20 | An overview of the predatory mortgage lending process |
| 21 | Risk-based mortgage pricing: Present and future research |
| 22 | Subprime lending: An investigation of economic efficiency |
| 23 | Limiting abuse and opportunism by mortgage servicers |

| # | Coutries studied | Coutries of the authors | Citations | Relevant keyword | Methodology |
|---|---|---|---|---|---|
| 1 | USA | Singapore and USA | 20 | Predatory Lending | Quantitative |
| 2 | USA | USA | 7 | Predatory Lending | Quantitative |
| 3 | USA | USA | 28 | Predatory Lending | Quantitative |
| 4 | USA | USA | 3 | Predatory Lending | Quantitative |
| 5 | USA | USA | 17 | Predatory Lending | Qualitative |
| 6 | USA | USA | 0 | Predatory Lending | Quantitative |
| 7 | USA | USA | 9 | Predatory Lending | Quantitative |
| 8 | USA | USA | 18 | Predatory Lending | Quantitative |
| 9 | Worldwide | Netherlands | 84 | Subprime and Predatory Lending | Qualitative |
| 10 | USA | USA | 12 | Predatory Lending | Quantitative |
| 11 | USA | USA | 10 | Predatory Lending | Quantitative |
| 12 | Worldwide | Australia | 15 | Predatory Lending | Qualitative |
| 13 | USA | USA | 10 | Subprime and Predatory Lending | Quantitative |
| 14 | USA | USA | 18 | Subprime and Predatory Lending | Qualitative |
| 15 | USA | New Zealand and USA | 42 | Subprime and Predatory Lending | Quantitative |
| 16 | USA | USA | 27 | Predatory Lending | Quantitative |
| 17 | USA | USA | 75 | Predatory Lending | Quantitative |
| 18 | USA | USA | 64 | Subprime and Predatory Lending | Quantitative |
| 19 | USA | USA | 16 | Subprime and Predatory Lending | Qualitative |
| 20 | USA | USA | 60 | Subprime and Predatory Lending | Qualitative |
| 21 | USA | USA | 26 | Subprime and Predatory Lending | Qualitative |
| 22 | USA | USA | 38 | Subprime and Predatory Lending | Quantitative |
| 23 | USA | USA | 9 | Subprime and Predatory Lending | Qualitative |

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| 8 | The Wharton School, University of Pennsylvania, Philadelphia; Graduate School of Business, Stanford University, Stanford, CA |
| 9 | Amsterdam Institute for Metropolitan and International Development Studies (AMIDSt), University of Amsterdam |
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| 13 | Center for Responsible Lending |
| 14 | Chapman University School of Law, Orange, CA |
| 15 | University of North Carolina at Chapel Hill; Department of Policy, John D. and Catherine T. MacArthur Foundation; Statistics New Zealand |
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| 17 | Grand Valley State University, Allendale, MI; Woodstock Institute, Chicago, IL |
| 18 | Board of Governors of the Federal Reserve System, Washington, DC; University of Pennsylvania, Philadelphia |
| 19 | Cleveland-Marshall College of Law, OH; University of Connecticut, School of Law, Farmington, CT |
| 20 | National Consumer Law Center, Boston, MA |
| 21 | Community Legal Services Inc., Philadelphia |
| 22 | Opinion Research Corporation, Princeton, NJ; Freddie Mac; Equitec; Freddie Mac |
| 23 | Chapman University School of Law, Orange, CA |

| # | Main Result |
|---|---|
| 1 | "results suggest that predatory lending practices contributed to high mortgage default rates among subprime borrowers, raising them by about a third" (Agarwal et al., 2014) |
| 2 | "Subprime lending flourished in a neighborhood that historically was redlined by conventional lenders, and created and exacerbated poverty, as it stripped equity from individuals and the neighborhood." (Botein, 2013) |
| 3 | "Subprime mortgage lending in the early 2000s was a leading cause of the Great Recession" (Faber, 2013) |
| 4 | "people wound up in foreclosure […] human costs of the U.S. housing crisis" (Crump, 2013) |
| 5 | "In the recent boom, predatory lenders preyed on cognitive limitations and biases of subprime borrowers to sell them high cost mortgages that they would not be able to repay" (Nofsinger, 2012) |
| 6 | "suggest that a formal cost-benefit analysis for cash-out refinances should be considered as part of the larger mortgage reform currently underway" (Garrison & Li, 2011) |
| 7 | "When controlling for loan and local conditions, we observe […] lower default levels in states with higher temporal and financial costs to lenders" (Goodman & Smith, 2010) |
| 8 | "predatory lending is associated with highly collateralized loans, inefficient refinancing of subprime loans, lending without due regard to ability to pay […] and poorly informed borrowers" (Bond et al., 2009) |
| 9 | "Subprime loans have been one important ingredient in the present crisis, but other ingredients go beyond subprime lending" (Aalbers, 2009) |
| 10 | "The evidence suggests that preemption did not create a significant competitive advantage for national banks endangering the dual banking system" (Whalen, 2008) |
| 11 | "Results suggest that the relationship between these loan features and foreclosure rates is much more complicated than the arguments for restricting their use assume" (Rose, 2008) |
| 12 | Religious traditions can have a positive influence on financial ethics |
| 13 | "suggest that policy makers can address predatory lending in the subprime residential mortgage market without restricting access to credit" (Li & Ernst, 2007) |
| 14 | "barriers to effective loan modifications should be reduced or eliminated where feasible, but that the securitization of subprime loans creates risks for borrowers" (Eggert, 2007) |
| 15 | "estimate that prepayment penalties and balloon payment requirements in 1999 refinance originations increased national foreclosure-related losses to lenders and investors" (Quercia et al., 2007) |
| 16 | "provides evidence that borrowers are being effectively sorted based on risk characteristics by the market" (Nichols et al., 2005) |
| 17 | "subprime loans lead to foreclosures at far greater rates than do prime loans. Moreover, subprime lending appears to account for a substantial share of foreclosure" (Immergluck & Smith, 2005) |
| 18 | "find some evidence of tightening loan standards in the subprime market over this five-year period" (Calem et al., 2004) |
| 19 | "While the secondary market does impose some discipline on the subprime home loan market, it is not enough to bring predatory lending to a halt" (Engel & McCoy, 2004) |
| 20 | "summarizes observations about the goals of predatory lenders and notes that by accomplishing these goals, lenders undermine the wealthbuilding capacity of affected homeowners" (Renuart, 2004) |
| 21 | "Information asymmetries, seller obfuscation, and search costs contribute to the inefficiencies in [the subprime market] and suggest several policy responses" (White, 2004) |
| 22 | "concerns over the relative efficiency of the subprime market may be warranted" (Lax et al., 2004) |
| 23 | Finds various abusive practices |

# Annex II

**Brief description of statistical models and variables used by the authors that made quantitative studies (complementary to the presented results)**

Agarwal et al. use a “classic difference-in-differences analysis that contrasts changes in mortgage market composition and loan performance in the treated sample with those in a control sample” (Agarwal et al., 2014, p.2). They compare mortgages between samples to examine differences in risky characteristics such as “negative amortization or prepayment penalties […] low documentation and low down-payment […] above-market rates, loans appearing to be unaffordable based on borrower characteristics, and loans with indications of fraud” (Agarwal et al., 2014, p.2) and their consequences in loan performance.

Botein (2013) uses both quantitative and qualitative methods, namely she uses public data about real estate transactions, but also interviews the homeowners personally to understand their reasons on taking subprime loans, and how they were affected besides facing foreclosures. She studies a total of 222 properties and uses property records from the New York City’s Department of Finance from 1966 through 2010, “sales data from 2003 to 2010 and foreclosure filings from 2000 through 2010, purchased from two private vendors” (Botein, 2013, p. 8), and obtains estimations for property values.

Faber (2013) uses a data set from Home Mortgage Disclosure Act (HMDA) that includes borrower characteristics, information about the house, application and Census region characteristics. He uses multinomial regression models to analyse mortgage approval processes from 2006, and includes an analysis of race and segregation on the approval of loans and on the determination if loans should be prime or subprime.

Crump (2013) uses 2004-2008 HMDA data and examines mortgage transactions on a sample of houses that had went into foreclosure and were located in a community where the majority of people were Afro-Americans. In his analysis he includes variables as “whether a loan was considered high cost […] borrower-level information such as race and ethnicity, loan amount, type of loan, and gender” (Crump, 2013, p. 5).

Garrison and Li (2011) use NMDR – National Mortgage Data Repository – information that contains relevant documentation not usually accessible to researchers, such as the application forms to loans, the closing statements, payments on previous loans and transaction fees. They

propose "reasonable assumptions to project the future cash flows under the cash-out refinance and under the alternative decision not to refinance […] we then measure its rate of return by two standard financial decision tools: internal rate of return (IRR) and net present value (NPV). We compare these two tools to identify the appropriate measurement of ''net tangible benefits.'' Then using a set of constructed variables for hypothetical cash-out refinance transactions, we ask under what conditions are the cash-out financially favourable or costly to the borrower. Finally, we examine the ''net tangible benefit'' for real cash-out refinances contained in the NMDR database as case studies" (Garrison & Li, 2011, p. 6).

Goodman and Smith (2010) utilize a sample from a 34 million loan database for all the United States with data from the third quarter of 2008 aggregated at the zip code level, and use state variations in foreclosures, "static and dynamic demographic information to control for economic variations and location fixed effects […] to determine the political and locational drivers of default" (Goodman & Smith, 2010, p. 2). The authors make a spatial analysis of the locations where defaults and foreclosures occurred.

Bond et al. (2009) simulate situations where there is one borrower and one (to analyse monopolistic lending) or more lenders (to analyse the effects of competition on predatory practices). In the monopolistic analysis they assume that the lender has an informational advantage over the borrower.

Whalen (2008) uses HMDA data to determine in which states each bank is present and to how many regulations will it have to comply, using this as an indicator of cost to the bank. He uses a multivariate regression model "to estimate the wealth and risk effects attributable to a series of preemption announcements by the OCC. The expected effects of the announcements are inferred from changes in the return generating process for portfolios of target firms on event dates when the agency disclosed relevant new information about their preemption decisions to the market" (Whalen, 2008, p. 6). The author starts by choosing the relevant dates when OCC makes announcements related to preemptions. Then he chooses a sample of banks which may be affected by those announcements, and groups them according to state or national level, and to size and number of states they're operating in. That sample is taken from a list of banks whose stocks were quoted on Bloomberg from October 2002 to April 2004. He ends up by estimating the returns to those banks from this process and tests if "preemption had significantly different wealth impacts on the portfolios compared" (Whalen, 2008, p. 12).

Rose (2008) uses more than 200,000 quarterly observations covering 31,353 loans that originated between the beginning of 1999 and mid-2003 in the Chicago metropolitan area. There's one observation for each quarter a loan stands active. If the loan is prepaid or goes into foreclosure, then he doesn't search for more observations after that. To do the econometric analysis, the author used a multinomial logit model. Starting with explanatory variables, he estimates their impact on the probability of foreclosure. The data Rose uses has very complete information, including if the loan is a refinance or a repurchase, if it is FRM (fixed rate mortgage) or ARM (adjustable rate mortgage), if there are prepayments or foreclosures and the dates those events occurred, if the loan was originated with low- or no-documentation, if there was a prepayment penalty period and its length, and if it included balloon payments.

Li and Ernst (2007) use data from almost 7 million loans from the Loan Performance (LP) Subprime Asset- Backed Securities Database. They take observations from 1998 through the first quarter of 2005 that span all the states and the District of Columbia (DC). The database they use has many relevant information on loans, namely origination date, FICO score, state, LTV ratio, zip code and prepayment penalty.

Quercia et al. (2007) use data about securitized subprime refinance first-lien loans gathered from LP Subprime Asset-Based Securities Database. They examine more than 122,000 refinance loans originated in 1999 that totalled almost 34 billion dollars, and record their payments through December 2003. They make their tests using a multinomial logit model to "estimate the impact that prepayment penalties and balloon loans have on monetary losses due to foreclosure for the lenders and investors who own the loans" (Quercia et al., 2007, p.17).

Nichols et al. (2005) use data from purchases made by more than 48 thousand households in 39 metropolitan areas that resulted in the origination of FRMs from February 1996 to July 1996. They make both a theoretical and empirical evaluation of the differences between the personal lending and the mortgage markets.

Immergluck & Smith (2005) make a multivariate quantitative estimation of the influence that subprime lending had on foreclosure levels, and also focus their analysis on neighbourhood effects. They acquired data for foreclosure starts from 1995 to 2002 on the Chicago metropolitan area, and then compared with lending data for the same area from 1996 to 2001 gathered from HMDA.

Calem et al. (2004) use data from four sources to get a list of subprime lenders, to get borrower' and mortgage characteristics for the two years studied, to build measures of neighbourhood credit risk separated by regions, and about the distribution of individual credit ratings on those regions. The authors estimate two models and in the second one include interaction terms to find any relationship between subprime lending and the racial composition of communities.

Lax et al. (2004) gather data from various sources, the main one a telephone survey to a population of borrowers who originated their loans from January 1996 to June 1997 and filtered 4,342 completed surveys. From QuickData they gather data about amount, purpose and type of loans. They separate purchases, refinances and second-liens. They compile credit history information about the telephone survey respondents from a credit repository, use information from Freddie Mac on pools of loans recently acquired, extract data from HMDA from 1996 and 1997, and meet with focus groups of lenders and borrowers to gather qualitative information. They "estimate two logistic regression models […] the risk-only model includes only risk measures—LTV ratio/FICO score, income ratio/payment ratio, product type, and loan purpose—as explanatory variables […] the expanded model adds borrower demographics and responses to key questions from the Gallup survey […] comparing the two models allows us to assess the impact that factors other than the typical risk factors used by underwriters (e.g., demographics, knowledge, and education) have on predicting the choice of market segment" (Lax et al., 2004, p. 26).