The Subprime Mortgage Crisis of 2007
A Market Failure or Moral Failure?

Candidate Number:
Word Count: 4076

Nota: D

Table of Contents

Abstract: 3

The Subprime Mortgage Crisis of 2007-2009: A Market Failure or Moral Failure? 4

Introduction 4

Chapter 1: Comparing Both Sides 6

Chapter 2: Lenders 8

Chapter 3: Borrowers 11

Chapter 4: Conclusion 13

Bibliography 17

Abstract:

This essay examines the relationship between the market side and the ethical side of what is known as the subprime mortgage crisis of 2007. The primary objectives in this essay are to analyze the financial crisis from its auspicious beginnings, through its development, and up until its final breakdown in 2007. The reader will see that the central theme of this crisis involved two sides: the borrowers and the lenders. Each shared responsibility for what ultimately led to the collapse of the housing market. On the lending side, I will elaborate on the historical background, government policies, and laws which allowed those in the mortgage and banking industry to take advantage of unsuspecting home buyers. On the borrowing side, I will apply the principles of behavioral economics and social psychology to explain human irrationality in purchasing homes. This essay will show that both sides were influenced by subprime lending which eventually became a catalyst for a global, economic downturn. Lenders and banks, enabled by government rules and regulations, were free to offer high-risk subprime loans to ethnic minorities as well as members of low socioeconomic background. These loans attracted home byers seeking good deals on mortgages, yet unaware that their decisions would lead many into financial peril. By the end of this essay, the reader will understand the confirmed failings associated with the crisis and know what it takes to avert a similar crisis in the future. My premise is that human behavior is pivotal in the observations I make in this investigation and suggests a new perspective in dealing with the nature of economic crises.

The Subprime Mortgage Crisis of 2007-2009: A Market Failure or Moral Failure?

Introduction

The subprime mortgage crisis of 2007 was a global phenomenon that significantly drove several countries into recession. There were housing bubbles in countries like the United States, Spain, Australia, and the United Kingdom, and even some smaller countries were threatened with bankruptcy. The root of the problem has been a subject of much debate. Some have argued that irresponsible, predatory lending practices are to blame, while others have said the crisis is the result of naïve, irrational behavior by borrowers. As a result, millions of individuals foreclosed on their homes, and the banking industry was brought to the brink of financial ruin.

It could be argued that the subprime mortgage crisis, which first began in the United States, has its roots in the Community Reinvestment Act, or the Housing and Community Development Act of 1977. With this legislation, among other provisions, lawmakers designed a way for banks to help borrowers, including those in low and moderate-income neighborhoods, to purchase a home. The Act, for example, prevented discrimination against those who could not afford a home. At first glance, this was helpful because it made home ownership available to more people. However, some of the Act's provisions were changed. For instance, the federal government introduced subprime authorization, which mandated that lenders granted more flexibility. This mandate opened the door to riskier borrowers who did not qualify for a prime loan, most commonly due to their low credit scores. These new provisions forced banks to pour $1 trillion into new subprime loans. These factors, as well as several others, led to "innovative" subprime mortgaging, which eventually evolved into a global disaster.

Such new lending strategies were what first caused the housing bubble in 1997, when the government promoted homeownership and house prices started to increase. Naïve buyers were lured by incentives and rates far below what they

were used to seeing. In the traditional market, the down payment required would have been 20 percent; in a subprime market, the average down payment was 6 percent. Those who once would have put $60 thousand down now only put down $18 thousand. To make the situation even riskier, 40 percent of borrowers made no down payment at all. Monthly mortgage payments were similarly affected. The payments began with a low introductory interest rate, followed by a higher interest rate for the remaining loan term. This could have been reasonable, if taken with caution. The majority of buyers suffered from a "payment shock," because they failed to pay attention to these escalating payments. However, this "payment shock" was just the beginning. One must wonder if it was the 'right thing' for lenders to heed the government's mandate to grant more affordable loans to minorities; were lenders in fact taking advantage of people they knew were a risk?

It can be said that the purpose of subprime authorization was to benefit buyers. Banks were offering innovative mortgages for which virtually any buyer could qualify. Such innovations included securitization, where banks bundled thousands of home loans into securities that were then sold to investors such as pension funds, mutual funds, and insurance companies, as well as investors in outside countries. Banks also introduced interest-only mortgages; borrowers could pay a low interest rate for the first couple years, but had to return to the amortized payment for the remainder of the term. These flexible arrangements attracted buyers, especially those who fit into the minority and low-income categories.

Humans are "perfectly irrational,"[1] a term coined by Dan Ariely in his study on behavioral economics, where he analyzes human beings' reactions to financial situations. Ariely has indicated that humans have a difficult time figuring out how much to borrow on a loan; therefore they are exposed to a much greater risk in the real-estate market. Essentially, the difference between standard economics and

---

[1] Ariely, Dan. *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York, NY: HarperCollins, 2008. Print.

behavioral economics is that standard economics is directed towards the rational decisions that "should" be made to gain the greatest outcome, where behavioral economics focuses on humans reacting to economic and financial situations.

Specifically, as these distinctions of economic study apply to a mortgage, banks gave buyers the maximum amount they could borrow, not the optimal amount they "should" borrow; the maximum amount indicated the highest amount possible that the buyer could pay, while the optimal amount was the highest amount that the buyer should borrow while avoiding financial risk. As the banks emphasized the maximum amount and gave less attention to buyer's optimal amount, it was difficult for buyers to calculate that optimal amount. Given the average buyers' naïveté of the mortgage market, many decided to go with the maximum amount. Surely, borrowers wanted the best payment schedule they could afford, staying as far away from foreclosure as possible; however, when considering a major purchase, we often behave irrationally. Ariely and behavioral economists like him would say it is not the buyers to blame but the nature of our thinking process, characterized by imperfect rationality. Others may argue that the buyers, not the lenders, are to blame because they purchased homes they could not afford. It can also be said that buyers knew the risk and relied on banks for bailout. However, there would have been no crisis were it not for lenders' and buyers' ill behavior. The Subprime Mortgage Crisis of 2007 was, and is a market failure, ending with buyers and lenders who took the major fall.

Chapter 1: Comparing Both Sides

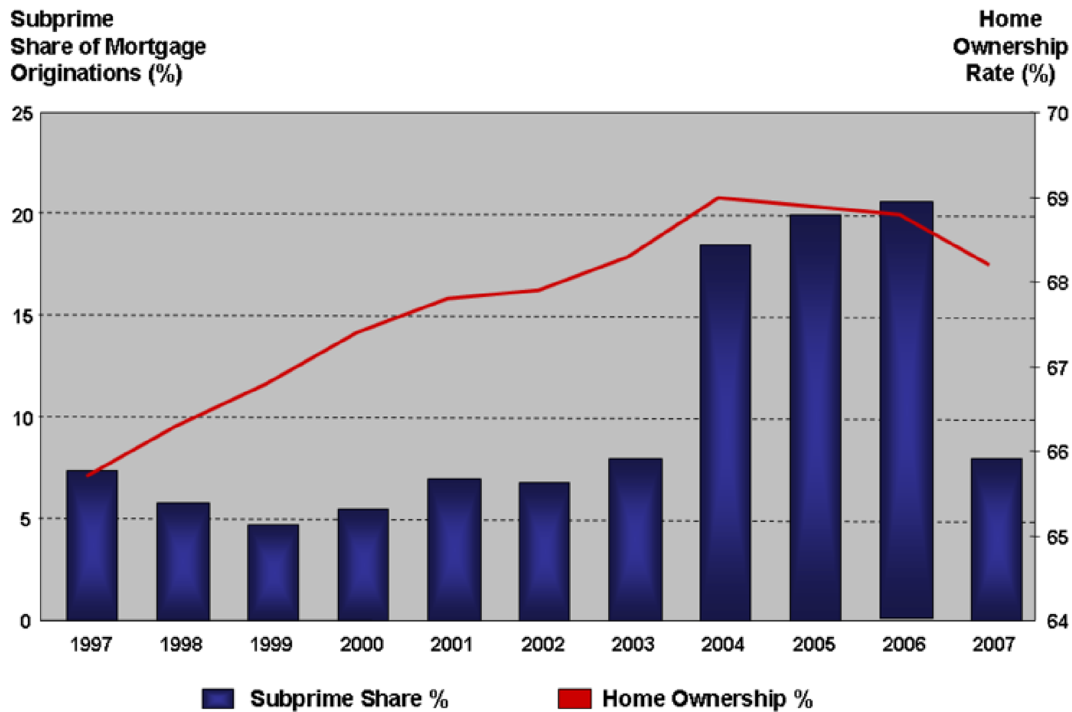
The key distinction between the two sides lies in the study of economics itself, specifically, standard economics versus behavioral economics. Lenders fall under the category of standard economics, where their actions are based on the rational theory of economics. This theory works best in financial situations where producers as well as consumers make rational decisions. Such financial situations also include events such as The Great Depression, beginning in 1929 and ending in the early 1940s, which was a tragedy of historic proportions, placing millions of Americans out of work. It is similar to the mortgage crisis in that the lenders

involved too performed reckless lending practices. The Great Depression also has its roots in the aspect of human psychology and irrational behavior. Furthermore, the reoccurrence of economic crises demonstrate the fact that rational decision-making is a practice much needed for the success of an economy.

In relation to the subprime mortgage crisis, lenders were acting according to the theory of standard economics, rationalizing that borrowers could process complex, multidimensional subprime contracts. In his working paper on economics and the psychology of subprime mortgages, Oren Bar-Gill (2008) posited that multidimensional contracts, which included low short-term prices and high long-term prices, "…can be explained as a rational market response to the imperfect rationality of borrowers" (p. 5).[2] Borrowers believed that they could refinance their loan before reaching the long-term payment, so lenders took this as a rational response and offered those loans. This was an error, which led to unaffordable home payments. The inability for the government to predict how individuals would react to subprime loans was the start of the on-going chain of events. Lenders and buyers were left with the flexibility of the market, a risky position for imperfect rationalists such as ourselves.

[2] Bar-Gill, Oren. "The Law, Economics and Psychology of Subprime Mortgage Contracts." *The Berkeley Electronic Press*. N.p., 2008. Web. 2013. <http://law.bepress.com/alea/18th/art47>.

Chapter 2: Lenders



The diagram demonstrates the share of subprime mortgages in relation to the level of home ownership of American households. Taken from the Harvard Report- State of the Nation's Housing, "Subprime mortgages remained below 10 percent of all mortgage originations until 2004, when they spiked to nearly 20 percent and remained there through the 2005-2006 peak of the housing bubble" (2008).[3] In addition, high default rates on subprime and adjustable rate mortgages (ARMs) began to increase, as well as the amount of high-risk mortgages given by lenders. This, and an increase in loan incentives, such as easy loan authorization and a long-term trend of escalating housing prices, encouraged borrowers to undertake difficult mortgages in the belief that they would be able to quickly refinance at more favorable terms. The increase in availability of subprime mortgage contracts led to an increase in unqualified buyers, all contributing to the

[3] "Harvard's State of the Nation's Housing 2008 | The Big Picture." *The Big Picture*. N.p., n.d. Web. 30 July 2013.

outcome of the crisis.

The major hit of the crisis occurred in 2008, where housing prices declined and the default rates of buyers increased. The period of rising housing prices began in 2002 and ended in mid-2006, where housing prices had increased by 87 percent from the stability of the 90s. After 2006, housing prices began their rapid decline, and by 2008, prices were approximately 25 percent below their peak in 2006, and the default rate was at 5.2 percent. These fluctuations in housing prices contain multiple rooted causes. The Community Reinvestment Act of 1977 may be classified as the origin of the crisis, where lawmakers declared new regulations for buyers to participate in subprime mortgage contracts. However, this is not the only cause; the actions and measures, which took place before the Act, are key concerns in contributing to the eventual crisis of 2008.

Laws were passed, new regulations were set, the subprime mortgage market was created, and mortgage investment became a worldwide phenomenon. The market truly had its origin in the hands of the investment managers. These men and women controlled the sum total of all the world's savings, and managed what can be referred to as the "global pool of money." Currently, this pool contains around $70 trillion, but several hundred years ago, the global pool contained $36 trillion, where investments consisted of safe purchases in treasuries and municipal bonds. In only six years, (from 2000 to 2006) this pool was able to increase to $70 trillion, whereas it took hundreds of years to reach $36 trillion.[4] The reason for this can be taken from a report named, "Global Pool of Money," provided by Public Radio International, in which Adam Davidson states, "Poor countries became kind of rich… China, for example, has over a $1 trillion in its central bank."[5] As a result, China, as well as other countries in the same situation, began to search for good investments.

With easy access to mortgage loans and their high interest rates, investment managers soon took hold of the opportunity. A system was set up where people

---

[4] "Transcript." *Home*. Chicago Public Media & Ira Glass, 2008. Web. 30 July 2013.
[5] "Transcript." *Home*. Chicago Public Media & Ira Glass, 2008. Web. 30 July 2013.

were able to collect mortgage owner's money and place it into the hands of investment makers. This system used a procedure known as securitization, in which mortgage brokers would sell the newly-owned mortgage to a small bank, the small bank would sell the mortgage to a worker of a big investment firm on Wall Street, and the worker would bundle up a few thousand mortgages into a pile to sell shares to the global pool of money. This process incentivized brokers to focus on the quantity of combined assets instead of the quality. Brokers converted the loans into securities, where the risk associated with the borrowers was not visible by investment firms. Securitization increased the yield of mortgages sent to investment firms, thereby diversifying the risk associated with one single mortgage payment. This was ideal for the investors, who benefited more and more as the piles of mortgages grew. The supply of mortgages continued to escalate, only leading mortgage brokers to search for more people willing to purchase them. The desire for more purchases is the next trigger to the crisis, where mortgage owners found a way to accumulate more mortgages.

The Community Reinvestment Act of 1977 intended to deliver equality in allowing the low-income population purchase a loan, while lowering conventional lending standards to meet these goals. However, by the year of 1995, the federal government issued an extension of the Act, requiring banks to extend loans in proportion to the share of the minority population. This led to the authorization of subprime mortgage contracts. Mortgage owners accepted these mortgages from risky borrowers and sold them to the investment firms. There was a market developed solely for subprime mortgage contracts, where lenders did not have to ensure that buyers qualified for a mortgage payment. Lenders selling loans at banks simply had to first grant the mortgage to a borrower, marking them as adjustable rate mortgages, and sell them to the mortgage owners. Lending agencies could make substantial profits once the mortgage was approved.

By 2005, the government pushed short-term interest rates upward. Adjustable rates were soon reset, monthly payment on these loans increased,

housing prices began to fall, and defaults soared. According to the analysis of the economic crisis done by James Gwartney, David Macpherson, Russell Sobel, and Richard Stroup, "The debt-to-income ratio of households was generally between 45 and 60 percent for several decades prior to the mid 1980s. By 2007, the debt-to-income ratio of households had increased to 135 percent."[6] This means that due to subprime mortgage authorization, housing costs took up nearly 135 percent of homeowners' income. The homeowners could not afford their mortgage repayments, and eventually stopped paying. Mortgage brokers were impeded from creating bundles of mortgages, and because there was no longer money flowing into the global pool of the world's savings, investment banks collapsed. As for the borrowers, millions were forced into foreclosure. The housing policies mandated by the government are the root cause, but also to blame is the predatory lending, performed by individuals who went against their better judgment to issue loans for personal gain.

Chapter 3: Borrowers

Convincingly, it was the combinations of housing policies, investment bankers, and greedy lenders who were the main cause of the crisis. However, digging deeper, one could also say that the borrowers themselves shared the blame. Humans have the capability to act rationally or irrationally, depending on the situation and decision needing to be made. The distinct line between irrational behavior and rational behavior is manipulated by the theory of economics. Standard economics assumes that people are rational and behave in a way to maximize their individual benefit. Behavioral economics, on the other hand, is a psychological study that does not assume people are rational, and focuses on figuring out what makes people behave the way they do. Behavioral economists proceed by analyzing behavior in a controlled environment, paying attention to the way humans react according to a structured setting. Pertaining to the influence of

[6] Gwartney, James, David Macpherson, Russell Sobel, and Richard Stroup. "The Economic Crisis of 2008: Cause and Aftermath." *Http://commonsenseeconomics.com*. N.p., n.d. Web. 30 July 2013.

psychology, facts about human behavior are taken into account, and the irrationality we humans attain can be confirmed.

The field of social psychology has shown that humans ignore what they do not expect or want to perceive. Taken from Scott Plous's book, "The Psychology of Judgment and Decision Making," he states, "You may feel that you are looking at things in a completely unbiased way, but, it is nearly impossible for people to avoid biases in perception. Instead, people selectively perceive what they expect and hope to see"(page 15).[7] Furthermore, when we first acquire information, we apply what we want and expect to see. Plous believes that this action can be described through "motivated" and "unmotivated biases." Motivated biases are factors that "motivate" us to choose one thing over another, by choosing which we are most in favor of. Unmotivated biases are the opposite in that they "motivate" us into moving away, and abandoning a choice based on its given qualities. This may seem simple, however, our "motivated" biases do not always work in our favor, and our personal desires can end up manipulating our choice, hindering our attempt to reason. This behavioral view can be supported through the theory of "cognitive dissonance," a theory proposed in 1957 by the social psychologist—Leon Festinger. This theory of social psychology suggests that one may experience psychological discomfort through inconsistencies, which lead to rationalizing behavior or changing attitude. One can deduce that people have "motivational biases" to reduce feelings of discomfort, or dissonance, and that these biases act towards reducing the importance of the dissonant elements. Hence, these motivated biases affect our desires to engage in certain settings or even grip certain information, and we may choose to avoid certain situations or the chance to learn new information. However, this avoidance acts as our response to the undesirable reality, in which we are reluctant to base our decisions on motivated biases that are useful to us. According to the Subprime Mortgage Crisis of 2008, it can be said that the majority of borrowers purchasing a subprime loan were victims of misguided cognitions. They

---

[7] Plous, Scott. *The Psychology of Judgement and Decision Making*. New York [etc.: McGraw-Hill, 1993. Print.

chose according to their motivated biases based on personal desires and which lacked reason. It is also argued that the borrowers responded with pure naïveté, and that they truly were unaware of the harsh reality they would soon encounter.

When the government placed new regulations on mortgages, leading to the authorization of subprime loans, people took this as a motivated bias. The new idea of subprime loans became publicized and the amount of people purchasing a home increased greatly. However, based on rational behavior, these borrowers would not of purchased the subprime loan if they knew they could not afford it. Yet, some borrowers may have known it would still be a risky purchase, but because of their strong desire, they rejected this feeling of dissonance and followed their motivated biases—an irrational effort to escape the undesirable reality. Moreover, Oren Bar-Gill (2008) states in his working paper discussing the economics and psychology of subprime mortgage contracts that "some borrowers did not enter into their subprime mortgage contracts with a full understanding of the costs and benefits associated with these contracts."[8] Therefore, not only was the crisis affected by the motivated biases of the borrowers, but also the lack of knowledge that the borrowers had pertaining to the contracts they were agreeing to.

Without lenders' incentives, buyers would not acquire motivational biases leading to such an irrational decision. The lending side of the crisis could argue that they were unaware in the behavioral aspect associated with their practices, however the irrationality of humans is inevitable; it is the lenders duty to be responsible in knowing how their customers would respond to their offers.

Chapter 4: Conclusion

The Subprime Mortgage Crisis of 2008 is a past event, but its effects on the economy and the victims who were involved can never be reversed. Whether who is to blame is still a subject of debate, the cause and effect of the crisis is apparent, and

[8] Bar-Gill, Oren. "The Law, Economics and Psychology of Subprime Mortgage Contracts." *The Berkeley Electronic Press*. N.p., 2008. Web. 2013. <http://law.bepress.com/alea/18th/art47>.

all that is left is the ability of learning from one's mistakes. Humans are prone to make mistakes no matter the circumstance. We are destined to act irrational even when we think we are being rational. We can be naïve and think we know what is best for our future as well as our present state when in fact we need much assistance. Greed and desire can greatly affect our decisions, and not for the better. These trends of human behavior were not only evident in the financial collapse of 2008, but also in events throughout history. The Great Depression resulted from banks issuing a credit business using stocks, a process known as speculation; banks offered the shares of the new company to stockbrokers who either bough the shares outright, or without buying the shares, resold them to their clients— the investors. Investors bought the shares in the hopes that there would be a demand, increasing the value of the shares and resulting in profit. This system worked fine as long as stock prices increased consistently. However, bubbles started to form and prices of stock increased exponentially. Eventually, the inflated prices of stock dropped, causing investors to pull their money from the stock market, which resulted in the market crash. Those who invested in stocks decided not to pay off their share and banks were unable to get their money from those who owed them. Banks were left with unpaid stocks and effectively went bankrupt. To make matters worse, some investors took loans to pay for shares of stocks and were left with huge amounts of debt and unable to pay off their shares or the bank loans.

From the perspective of a behavioral economist, the act of taking out high-risk loans is an act of irrationality. Buyers' unaware of the risks of their investments led them to make irrational purchases. The cause of the Great Depression was an overflow of credit, driven by banks' reckless lending practices. Banks and buyers in this scenario shared a common false assumption; both sides were overly confident on the success of the market, not considering the possibility of a drop in stock prices. This behavior of denial comes from the refusal of banks and buyers to see the possibility of a drop in stock prices. Banks and investors were misinformed about the speculative nature of the existing stock market and were highly influenced by the prospects of financial gains. Limitations on critical financial data kept

investors from the knowledge that is needed to make well-informed decisions. In the Subprime Mortgage Crisis, the banks acted deceitfully and lured buyers to sign up for subprime loans, which would eventually turn into high interest rate loans. For buyers who better understood the implications of their choice to sign up for subprime loans, the banks were less than cooperative in advising them about the financial consequences. The main problem was that buyers were given the freedom of choosing to purchase a home loan, without being informed of the rational steps they should take to eliminate risk. The complication with giving freedom to individuals in a financial situation is that when humans are given the privilege, they can make irrational decisions based on naïveté and misguided cognitions. They were left to act with their emotions of greed and desire for financial gain, while obtaining a significant degree of naïveté. These factors, and the errors in the structure of the market can surely demonstrate the immense tragedies that followed.

The reoccurrence of economic crises show great similarities in the relationship between human behavior and decision-making in economic situations. It is evident that human psychology plays a pivotal role in the outcome of our decisions. This is shown by the fact that millions of people were affected in the economic disasters; therefore, all humans share similar thought patterns in making decisions. However, as human beings, it is difficult to fix the problems of our irrationality. We are responsible for our foolish decisions only up to an extent. The government's mandates led people to make irrational decisions based on misinformation, sponsored by government agencies. The government was at fault for not realizing the risk we humans put ourselves in. Furthermore, the government miscalculated the impact of economic policies that allowed banks to exploit buyers who lacked experience with mortgage contracts. Banks could not gage the individuals ' reactions to risky, zero-interest loans and underestimated how the combination of greed and poor-rational thinking would affect their decisions. This error in judgment was the true culprit. In order to avoid future financial meltdowns, we must not only take into consideration that humans are genetically coded to act

irrationally, but also hold policymakers accountable for weighing the risks and benefits of future regulations as they apply to the most vulnerable sectors of our society. For example, government policies can be delivered to investment bankers and lenders with proper instruction in how to ensure buyers that they are choosing wisely and for their benefit. Informing inexperienced buyers of all the risks involved in their purchase will provide them with the knowledge to act more rationally. As buyers become more skillful in rational thinking, the economy may experience a reduction of buyers leading to less capital influx into global markets. In the short term, this shift may not seem as profitable when compared to massive numbers of registered mortgages, yet, in the long term, it could eliminate the likelihood of a future crisis. To achieve economic growth and stability, we must triumph against greed and personal gain, as well as not overlook the innate irrationality of humans.

Bibliography

1. Ariely, Dan. *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York, NY: HarperCollins, 2008. Print.

2. Bar-Gill, Oren. "The Law, Economics and Psychology of Subprime Mortgage Contracts." *The Berkeley Electronic Press*. N.p., 2008. Web. 2013. <http://law.bepress.com/alea/18th/art47>.

3. Gwartney, James, David Macpherson, Russell Sobel, and Richard Stroup. "The Economic Crisis of 2008: Cause and Aftermath." *Http://commonsenseeconomics.com*. N.p., n.d. Web. 30 July 2013.

4. "Harvard's State of the Nation's Housing 2008 | The Big Picture." *The Big Picture*. N.p., n.d. Web. 30 July 2013.

5. "Transcript." *Home*. Chicago Public Media & Ira Glass, 2008. Web. 30 July 2013.