

The Subprime Mortgage Crisis: The Role of Residential Segregation and Impact on the American South

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ABSTRACT

This study is an analysis of the causes and effects of the subprime mortgage crisis with a specific focus on the role that residential segregation and discriminatory practices played and the impact that the financial crisis had on the American South. The project delves into the inner workings behind the financial crisis and the distinctive roles of mortgage lenders, investment banks, and other financial institutions in the magnification and extension of credit risk around the world through the United States' housing and financial markets. Many college professors were interviewed for this project, including Gary Hoover, a professor at Tulane University and the Executive Director of the Murphy Institute. He was also invited to speak at the first Nobel Peace Prize Summit to speak on the subject of the "Economics of Inequality." Two other professors who were interviewed for the article are Daniel Keniston, an associate professor at LSU's Department of Economics, and Brian Andrews, a senior instructor in LSU's Department of Finance, Executive Director of LSU's Real Estate Research Institute and Commercial Banking Initiative, and the Principal of Andrews Commercial Real Estate Services. The purpose of this project is to discover the most critical effects of the financial breakdown, the extent to which repercussions were disproportionate in Black and other minority communities, and the social outcomes of the subprime mortgage crisis on the American South. This study delves into an important piece of American history and attempts to uncover the subtleties of the U.S. housing and financial markets.

Introduction

From 2007 to 2009, the worst financial crisis in nearly 75 years devastated the U.S. financial system and economy with widespread impacts across the world and detrimental consequences to all Americans mortgagors and investors. Years of policies and innovations set the stage for this economic meltdown, and once complete control of the financial system was in the hands of the major Wall Street firms, all they had to do was realize the profitability in exploitation and quick, cheap, money-making scenarios. With little to no regulation, the U.S. financial sector dug itself into a hole that was almost inescapable for inexpensive financial strategies that misled their investors and eventually brought themselves down.

The subprime mortgage crisis and subsequent Great Recession were brought on by a range of originators, motives, and occurrences that all eventually combined to form a perfect economic climate for a housing boom, which was extremely profitable for almost all involved in the financial and mortgage markets, but many started to look more even cheaper, more profitable strategies that exploited their customers and investors for economic gain. There are a number of happenings and developments that have long been understood as causes of the subprime mortgage crisis because they were the occurrences that allowed the crisis to transpire. Some of these have been exaggerated in their role of inciting the economic situation, and some others have had their function in the development downplayed until they were nearly forgotten. None of the factors that are discussed with respect to the subprime mortgage crisis caused the financial breakdown on their own, and it is extremely conceivable that if one of these happenings had not occurred the crisis would still have taken place, albeit most likely at a lower magnitude.

The subprime mortgage crisis is best described as a tiered structure with borrowers at the lowest level, mortgage brokers and originating companies at the next highest, investment banks and shadow banking firms at the next tier, and investors and separate parties that purchased mortgage-backed securities at the highest rung. In actuality, it is far more complicated than that structure due to the introduction of complicated financial products such as the credit-default swap, the roles of separate institutions such as the credit rating agencies that played a huge part in the lead up to the crisis, and the lines that connect each section of the crisis to another hundred times over, but the simplest way to oversee the causes of this financial crisis is to first define the major sources and explanations.

The first of the origins of the subprime mortgage crisis began with economic greed in the mortgage brokers that took advantage of their clients to supply them with high interest rate, subprime mortgages even if they qualified for higher-quality, prime loans. This began in the early 2000s as mortgage originators realized the potential in marketing loans with high fees and began encouraging their brokers to provide borrowers with these low-quality mortgages. These loans began with low, “teaser” rates, but they eventually shot up in interest payments, which put borrowers in an extremely difficult position. Mortgage brokers began creating and putting to use even more complicated mortgage contracts, such as loans with interest-only and minimum payment options that disadvantaged an unaware borrower.

The second of the major sources that ruled over the subprime mortgage crisis was the role of investment banks that packaged and securitized mortgages into bonds and sold them off to other parties. This was an extremely profitable business strategy as the housing industry was booming and real estate prices seemed to be on a perpetual rise, but as with the mortgage brokers, Wall Street firms eventually began to seek cheaper, higher profit margin financial strategies that came at the expense of the customers and investors. Complicated financial instruments such as subprime collateralized debt obligations were formed, and investment banks pressured credit rating agencies into acting to the shadow banks’ desires. Millions of investors were misled about the quality of investments that were making, and speculation ran rampant throughout the mortgage bond and credit default swap markets. Extreme levels of risk were spread out across the United States and many other countries, and when the housing bubble burst, the world found itself in a global financial crisis and recession.

Many individuals become hung up on the larger, more obvious impacts of the crisis, and they forget to delve into the underlying procedures and meanings through analyses of disproportionate impacts of the subprime mortgage crisis. Two major elements of the leadup to the crisis and its repercussions across the United States are the roles of residential segregation and discriminatory mortgage loan practices and the societal effects of the financial crisis in the largest-impacted areas of the nation, such as the South and West. Mortgage brokers encouraged heavily-disadvantaged and exploited areas with high segregation and poverty rates into taking predatory loans that almost always resulted in foreclosure, lower credit scores, and higher debt. Regions with either high poverty rates or extremely high rates of housing production were impacted the hardest, and the long-standing effects are still visible today.

This project has the intention of discovering the most significant causes and effects of the subprime mortgage crisis, the role that discriminatory practices and residential segregation played, and the societal effects of the crisis in the American South. Many college professors in finance and economics were consulted on these topics, and the transcripts of their interviews can be found at the end of the paper.

The Role of Mortgage Lenders

The economic boom occurring in the early 2000s created a sufficient demand for the creation of a housing bubble in the United States. Low regulation, an influx of money into the housing market, and the securitization of mortgages that allowed lenders to provide far more mortgages to those that previously had not been able to obtain them all provided fuel for the fire of the housing bubble to spike to extreme levels. The economic boom provided by low interest rates created the demand for housing, and as money was poured into the market, the demand only increased. The flow of increasing amounts of money into the real estate market was due to the mild recession produced by the bursting of the dotcom bubble and 2001 terrorist attacks and the loss of trust in the stock market that those occurrences

caused. The chaotic increase in home-buying that drove housing prices up was allowed by lenders providing mortgages that contained low-interest rates. As the demand for houses grew, mortgage originators provided an ever-increasing amount of loans to the many people looking for housing. The first section of the development of the subprime mortgage crisis originated in the actual administering of mortgages by lenders.

Mortgages can be classified in many different ways, but the most important two classifications in the financial crisis of 2007-2009 were prime and subprime mortgages. Prime mortgages are loans made to people with high credit scores and verified income and assets that are considered very likely to be able to pay off their mortgages. At first, almost all mortgages fell into this category, which made the bonds quite safe and profitable. As aforementioned, one of the direct results of the securitization of mortgages was the ability of banks to supply more loans because of their new capability to sell these mortgages off to banks for a profit. This directly took the risk of the possible defaults on loans off the banks and companies that made these mortgages and onto the buyers of the mortgage-backed securities. Mortgage lenders were constantly being pushed by the government to increase their radius of loans to lower-income neighborhoods, and beginning in 1999, mortgage lenders realized the profit that could be made from following these suggestions. Mortgage lenders took advantage of these communities by rating them as high-risk borrowers and, therefore, charging them far higher interest rates that dramatically increased the chances of the borrowers not being able to meet their monthly payments. These mortgages became known as subprime, and their creation began the process of predatory mortgage lending. The housing bubble fed off the newfound ability of lenders to provide mortgages to borrowers with lower credit than usual. The demand only increased as these subprime borrowers were able to obtain mortgages, and housing prices reached higher and higher levels.

The lenders no longer had concern for the quality of their mortgages because they were able to sell them off to investment banks that combined the low-quality, high-risk mortgages with lower-risk mortgages or many other financial assets in a pool that seemed to be of higher quality than it actually was. The investment banks then sold these bonds to different entities that were largely unaware of the risk that they had just taken on. Almost no one at the time thought of the fact that these low-quality, high-risk mortgages would most likely default in the future due to the high interest rates. Mortgage lenders' top priority was to supply as many mortgages as possible, and subprime mortgages quickly became a colossal industry that held mortgage lenders best chances at giving out the most loans as possible. Lenders began to think of diverse ways to supply mortgages, even to those that almost definitely would not be able to afford the loan. They began to create many different types of loans that were designed to trick the borrowers into thinking that they were choosing the right option by taking out a new loan, but they were just being forced into paying off a new higher-rate loan. Mortgage lenders would repeatedly call potential subprime borrowers and convince them to take out a new mortgage that would allow them to pay off all of their other debts and combine them into a single loan. Predatory lending came into effect here as the lenders would practically lie to their borrowers about the interest rates and payments of their mortgage or use the borrowers' limited knowledge against them. These borrowers had almost no previous knowledge of how these mortgages worked, and the mortgage lenders did not hesitate to use this to their advantage. The borrowers were under the assumption that they were taking advantage of the current low interest rates by refinancing and combining their debts into one mortgage loan. They weren't aware of how quickly these loans would become difficult to pay off when the economic climate changed.

The fuel for the subprime mortgage crisis came in the form of the adjustable-rate mortgage (ARM). These loans were at the center of the entire financial crisis. They are also referred to as floating or variable rate mortgages. The defining factor of these mortgages was that the percent of interest could change throughout the duration of the loan. These loans usually began with a lower "teaser" interest rate, but after usually two to five years, the interest on the loan would shoot up. This new "floating" rate would often be based on indexes, such as the federal funds rate. This rate is produced by the Federal Reserve, and it refers to the interest rate that the Fed suggests banks trade their federal funds to each other at overnight. As borrowers reached the end of the life of their teaser rate, they found themselves with higher payments every month. About 80 percent of the subprime mortgages that were loaned in the years coming up to the financial crisis of 2007-2008 were adjustable-rate mortgages. These ARMs were designed to trick and deceive the borrower into taking out a loan that they could very possibly not be able to afford later in life.

Many families found themselves with a mortgage loan that began at an 8% interest rate that rose to 12% a few years after they took out the loan. It's obvious how directly this contributed to the financial crisis. The numbers of these loans went up drastically before the subprime mortgage crisis, and when the interest rates shot up, defaults began to spike in never-before-seen ways. Housing prices fell, and even with the ability to sell their houses, it became nearly impossible for the borrowers to pay off their debt or refinance to a lower fixed interest rate on their mortgage. While ARM weren't all subprime loans, the percentage dramatically increased in the years leading up to the financial crisis.

Many new mortgage instruments came into being as the regulation on the financial markets of the United States steadily decreased. Mortgage originators continued to produce new kinds of loans that were designed to trick the borrowers into taking out a loan that required more payment than would most likely be readily available to them. All of these new instruments contributed to the production of the housing bubble and the eventual collapse of the housing market. The main, defining loan types were the adjustable-rate mortgage and the fixed-rate loan. These two set the stage for many different spin-offs that were created for public use. One loan that was created as the demand for subprime mortgages grew was the interest-only loan. In this mortgage, the borrower is only required to pay interest on the loan for a specific amount of time, and when the allotted time is up, the monthly payment increases to include interest and a part of the principal. The interest-only loan is usually produced as a type of ARM, so the interest rate would often change by the year after the mortgagor would stop paying only interest on the loan. Once the maturity on the loan has been used up, the only options the borrower has are to make the lump sum payment, attempt to refinance the mortgage for a new option with potentially lower interest, or sell the home to pay off the loan. While this form of mortgage can offer some advantages, it does not allow the mortgagor to build up equity in their property, which can only be done through making the principal payments. Borrowers in the years leading up to the financial crisis sought to take advantage of the low interest rates with interest-only loans, but they did not take into account if they would be able to make the significantly larger monthly payments that would come. These loans were extremely attractive to subprime borrowers due to the low monthly payments, and because of this, interest-only loans became a major form of predatory lending in the buildup to the economic meltdown of 2007-2009.

As the mortgage originators' neglect to take into consideration the riskiness of the loans they were supplying continuously increased, more and more mortgage forms were made to appeal to low-income borrowers, without respect for the riskiness of the mortgage the loaners were taking on. Mortgage originators were completely focused on the quantity of loans that they annually made, and they gave little to no thought about the quality of these loans. This all stemmed from their ability to sell these loans off to banks and other enterprises that would form bonds out of them and sell these risky pools off to unsuspecting buyers. Once the mortgage originators sold the loans off to banks, the risk was taken completely off them, so companies continued to take advantage of this ability and attempt to grant loans to all those that would accept. Low-income borrowers had historically been denied mortgages due to their riskiness, and the only loans they could usually obtain were small FHA-insured loans.

The mortgage originators saw the potential for a massive number of mortgages in the subprime borrower community. Another form of an ARM that was created just for these subprime borrowers with low-income and little to no assets to use as collateral was the no income, no job, no assets loan (NINJA). These loans came into popularity shortly before the financial crisis and are credited with significant damage to the subprime mortgage industry. The NINJA loan does not include the typical verification process that most loans require. No documentation of assets or stable income would need to be submitted, so these became quite attractive to many low-income, subprime borrowers. This created many risky outcomes for both the lender and borrower, but as the securitization of mortgages occurred, the lenders were able to pass on this risk to investment banks that disguised them in complicated financial practices and opaque bonds until no one understood the riskiness of the financial instruments that were being hailed as the greatest financial innovations of the time. The borrowers were not as able to ignore the riskiness because, eventually, the interest rates on the loan would increase and the borrower would fall into debt, resulting in lower credit scores and an inability to require future loans. These borrowers were often tricked or completely lied to by the mortgage originators, who would attempt to confuse the borrowers into believing that they could afford these expensive mortgages.

After the financial crisis of 2007-2009, far stricter regulations were put on lenders, and some of these required stricter requirements for obtaining a loan, which practically extinguished NINJA loans.

One significant type of ARM that was used in great amounts before the subprime mortgage market crash was the option adjustable-rate mortgage. This form of loan allowed the borrower to choose their form of payment from several options every month. They could pay off the loan with interest and part of the principal as a traditional mortgage, or they could provide smaller payments or simply pay interest-only returns on the loans. As housing prices rose, borrowers sought out these loans, and they often chose to make smaller payments in the early life of the loan. After the teaser rate on their loans expired, borrowers found themselves facing increasingly higher monthly payments, and if they had only provided minimum payments on their mortgages, they also found themselves owing more on the principle of the loan. This was because many option ARM's minimum payments didn't meet the required monthly interest payments. After the beginning of the fall of housing prices, borrowers found themselves without methods to pay off these mortgages, and the subsequent spike in defaults and foreclosures rocked the financial world in unforeseen and unimaginable ways.

The entire subprime mortgage industry was centered around the belief that housing prices would continue to rise. The increase in housing demand following the economic boom of the early 2000s began the steady incline in real estate prices, and as more mortgages were supplied, the demand only increased. The basics of supply and demand, however, ensured that eventually this housing bubble would burst and housing prices would fall, but financial institutions were blinded by greed and desire for cheap, quick, and profitable strategies. They knew that the housing bubble would eventually burst, and many mortgages and securities would lose value, but they didn't know when this would happen. This resulted in them remaining in the subprime mortgage bond industry with the desire of profiting as much as possible before the crash, and through this, the shadow banking sector magnified the role of the subprime mortgage bond market and allowed for an economic catastrophe in the event of a fall in housing prices. The concept of "too big to fail", selfish greed, and a significantly high level of confusion in the mortgage bond market, even with the actual bond traders themselves, blinded many people from the ensuing crash.

The Role of Residential Segregation and Discriminatory Practices

The driving forces behind the subprime mortgage crisis of 2007-2009 have long been identified and analyzed in the years since the crash. However, there is one defining factor that has been highly overlooked until it was recently brought to light. The role of residential segregation and the marketing of risky subprime mortgages to specific races played a significant part in this crisis. Foreclosure rates differ significantly between races, and it has been proven that the subprime mortgage crisis severely impacted Black communities far more than other races.

Residential Segregation has long been a practice that acts as a fundamental component of the United States housing system. While racial segregation in Black communities has definitively decreased in the past years since the Civil Rights Movement of the 1950s and 1960s, this has predominantly been in areas with low concentrations of minority populations. The larger concentrated areas of Blacks and Hispanics have stayed almost the same. Hispanic and Latino segregation has also increased in the past years, which has led to an increase in discriminatory practices against these races as well. The history of redlining and other discriminatory real estate practices created highly concentrated and underserved pockets of Blacks and Hispanics. Starting with the creation of the Fair Housing Administration, racial housing segregation has become a defining factor of society and the real estate industry. Many prevalent discriminatory practices have emerged in the years that followed the New Deal programs. Racial steering is one of the most well-known of these systematic problems. This practice is where real estate agents attempt to guide their clients away from specific neighborhoods or simply refuse to notify their clients that these neighborhoods are available to them due to their racial background. Even if these other areas fit their parameters and are completely affordable to them, agents may still force segregation on their clients to prevent racially diverse communities and create highly concentrated minority areas. Real estate agents may do this through a combination of prejudice and with the intention of creating separate housing markets that maximize the number of homes sold each year and subsequently raising the

agents' commissions. While racial steering was banned in the Fair Housing Act of 1968, a study enacted by Newsday¹ in 2019 on the prevalence of steering in today's society discovered that the discriminatory practice still plays a significant role in housing with clear racial steering in 24 percent of their tests.

Another highly influential form of residential segregation is blockbusting. This discriminatory practice is when people involved in the real estate industry attempt to influence white individuals into leaving their homes by falsely informing them that the characteristics of their neighborhoods are quickly deteriorating into low-quality and dangerous levels to create unhealthy demographics. The goal is to frighten the white homeowners into fleeing from their homes and selling their property for significantly lower prices to Black and Hispanic individuals. This allows the agents and developers to resell the houses at much higher prices and receive superior commissions. This form of discrimination was also outlawed in the Fair Housing Act, but just as with racial steering, the rife practice still has extreme impacts on the United States demographics in middle-class neighborhoods.

The final and definitively most important and influential type of discriminatory real estate practices that have plagued the United States is redlining. This form of perpetuating racial segregation was introduced with the establishment of the Home Owners' Loan Corporation in 1933. This enterprise was designed to provide economic stability as the Great Depression raged through the United States by buying mortgages that had fallen into foreclosure and refinancing the loan. The Federal Housing Administration (FHA) that was created in the following year as a segment of the New Deal program also used this discriminatory practice to determine which borrowers should be provided with or guaranteed mortgages. The practice is defined as when a private firm or government enterprise refuses to provide residents in a certain area with a mortgage or loan because of a high concentration of minorities in their community. It began as government agencies created maps of housing systems with separate zones that each held different levels of risk in mortgage lending. These colored sections were each defined by the percentage of racial minorities, such as Blacks and Hispanics, that lived in each. The areas that contained the highest concentration of these races were dubbed as "hazardous" to lend to and outlined in red on the maps. The cascading effects of this overtly racist practice are monstrous and have spread to every corner of society with the intent of creating more difficult living situations for minorities and promoting the white population. It is impossible to put into words the immense and far-reaching effects that redlining has created. The consequences of redlining range from unmistakable housing segregation and a decline in the quality of the environment in these red zones to predatory lending and refusal to provide mortgages simply because of a high concentration of a minority population. These effects are long-standing, and neighborhoods that were denied economic investment are still lagging behind other areas that weren't discriminated against by redlining programs. Redlining has been proven to stimulate and increase racial segregation in neighborhoods that were marked as "hazardous" to provide loans to. It concentrates and increases the Black population in predominantly-Black areas throughout the years, and it also has the same effect in increasing the percentage of whites in majority-white neighborhoods. While redlined areas in cities currently compose far smaller percentages of their cities than when they were created, the imbalances in economic opportunity and many other segments of society are indisputable. A 2021 study done by Erik Steiner, Matt Nowlin, Jeramy Townsley, Rebecca Nannery, Unai Miguel Andres and Sharon Kandris² on equity in economic opportunity has determined that redlining and 1990s segregation has coincided to make it so children born into redlined, high-risk rated areas grow up to possess severely lower-income levels. People born into low-rated neighborhoods have an annual income that is decreased by about \$15,000 by the age of 30. This effect occurs even while their parent's incomes continue consistently. Those who are born in A-rated sections on redlining maps have an income of almost \$35,000, while B- and C-rated neighborhoods make a median income of slightly over \$25,000. Children born in D-rated neighborhoods usually make about \$20,000. Redlined sections of cities have historically obtained less protection from lawmakers, and therefore, are significantly more likely to house polluting factories and projects that severely decrease the environmental quality of the neighborhoods. Nitrogen dioxide is an extremely unhealthy and destructive pollutant that has been discovered to be significantly more prevalent in hazardously-rated neighborhoods. This environmental pollution has led to increased percentages of children born with asthma in D-rated neighborhoods. These redlined areas in cities have also been found to be 5 degrees hotter than higher-rated sections of cities. A 2021 study done by Jeramy Townsley, Unai Miguel Andres and Matt Nowlin³ has

also confirmed that residents of historically redlined areas are subject to far worse health conditions. The redlining grades and segregation levels in the neighborhoods account for 75 percent of the disparities in the amount of diabetes between neighborhoods. In one month, residents of D-rated areas proclaimed poor health days 3 times more often than A-rated neighborhoods.

While redlining generally does not allow Black communities to have access to mortgages, it created another discriminatory practice that underscored and perpetuated the subprime mortgage crisis called “reverse redlining.” This process was defined as when, instead of refusing mortgages to the residents of these red zones, the mortgage lenders and banks would provide loans with significantly higher interest rates to make up for the increased risk that redlining suggested in the red zones. This discriminatory practice became extremely prevailing and extensive in the years leading up to the crash and subsequent crisis.

The Fair Housing Act was approved by Congress in 1968, and the purpose for the law was to cease discriminatory practices by direct providers of housing. This includes real estate companies, landlords, lending institutions, and many other establishments that are involved in the housing market. These discriminatory practices can include denying services because of the applicant’s race, sex, religion, disability, etc. The act is enforced by the Department of Housing and Urban Development at a federal level. This statute was one of the final results of the Civil Rights Act of 1964 that was passed in response to the civil rights movement of the 1950s and 1960s. While the Fair Housing Act had the potential to change racial segregation across the United States for many years, a 2018 study done by Jessica Aiwuyor⁴ explained that it has not been enforced to as great an extent as it needs to be to create a more equitable housing market.

All of these discriminatory practices fed into the buildup for the subprime mortgage crisis by concentrating and discriminating against minorities. Real estate agents and developers attempted and succeeded to increase residential segregation for an increase in housing turnover and commissions. The subprime loans that became so popular in the early 2000s were largely marketed to existing homeowners, rather than people looking to buy houses. These loans deprived homeowners of the equity that they had contrived in the years prior to taking out the loan, and they had the overwhelming ultimate effect of actually forcing homeowners out of their houses. Mortgage originators were aware of these possibilities, so when these loans were first introduced, they were utilized in Black and Hispanic communities. These families were the least sheltered by the government and were the least appreciated and valued by the mortgage lenders and other entities in the housing market.

Residential segregation has always had cascading effects over every aspect of life in predominantly minority neighborhoods. This systematic separation has the purpose of spreading out different races, and amplifying the current factors that impact each community. The discriminatory practice attempts to form neighborhoods that are almost completely one racial group. This magnifies the effects of certain discriminatory practices that are based off of the density of a minority group in a certain area. The disadvantages that Black individuals are already presented with are greatly increased with high levels of residential segregation. This creates natural areas for risky subprime lending and predatory loans. Mortgage originators discovered these highly segregated neighborhoods to be in desperate need of service and, due to a concentration of disadvantages, were less experienced in mortgages and loans. This created a hot spot for predatory lending as lenders were able to take advantage of these underserved communities in ways that were never possible with predominantly white areas. Racial segregation made economic exploitation fairly common in these discriminated areas, and those who lived in these areas often didn’t know that they could acquire better services elsewhere. As these people were used to exploitation, lenders found it quite easy to market subprime loans to them.

Racial segregation had always created easily exploited neighborhoods, but predatory lenders did not identify the potential that these areas held for them until the 1990s. The securitization of mortgages is once again the component at the center of this dilemma. Mortgage originators once avoided these highly segregated communities because of their fear of high levels of defaults on loans. When the ability to sell these loans off to banks for a profit instead of keeping them and waiting for interest payments to become profitable became an often used action, the lenders saw the potential for easy exploitation in these neighborhoods. The risk of the loans no longer laid on the lenders but instead on the buyers of these loans and securities that contained them. This completely changed the entire system as the

amount of deposits was no longer the limiting factor for mortgage originators. Lenders were only restricted by the amount of people that they could convince to borrow from them and the trust that securitized mortgages would remain popular with constant buyers. Mortgage originators were given lists of potential borrowers that their companies wanted them to market subprime mortgages too. An overwhelming majority of the people on these lists were Black, and lenders were purposed with calling these potential borrowers and attempting to convince them to refinance into new subprime loans. Lenders sold these loans to mortgagors by explaining them as eradicating their old debts by combining them into a single mortgage, while what they were actually doing was giving these borrowers a new, higher-costing loan that could result in the borrower losing their home.

The buyers of the loans and creators of the securitized mortgage bonds were able to compile pools of mortgages with different risk levels into bonds that held practically any level of risk and average interest rate they wanted. They would then sell these bonds to another entity that would end up taking on the original risk. Due to their ability to use and sell basically any mortgage no matter the risk, investment banks and other organizations were always in support of buying subprime, risky mortgages from lenders. The mortgage lenders were now only interested in the amount of borrowers that they could acquire, so they found these often exploited, highly segregated neighborhoods were easy sources of subprime borrowers. Racial minority borrowers went from being almost unable to obtain a mortgage to being the most targeted for these subprime loans.

These subprime lenders placed Black and Hispanic communities at the center of their radar for these loans, so when you consider their overall population number, Blacks and Hispanics held an excessive portion of the costs that made up the subprime mortgage industry. These minority races were significantly more likely to receive subprime loans when controlling for qualifications that should be the basis for a mortgage loan. The discriminatory real estate practices that were prevalent in the years leading up to the crisis created a mortgage market that was completely based on the racial characteristics of neighborhoods. These practices were executed with the intent to maximize housing turnover and subsequently increase commissions, but they ended up weakening and disrupting the neighborhoods with high levels of buying, selling, and housing turnover.

In 2000, 50 percent of the loans that were issued to homeowners in predominantly Black communities for refinancing were subprime. Black and Latinx homeowners with high credit scores were 3 times more likely than whites with identical credit scores to be provided with a higher interest rate mortgage from 2004 to 2008. When controlling for all factors that are usually considered when determining what type of loan a borrower should be offered, a study enacted in 2014 on the years leading up to the financial crisis discovered that Black borrowers were 103 percent more likely than whites to be administered a high-cost mortgage, while Latinx homeowners were 78 percent more likely.⁵

In a research study done by Jacob Faber that he presented at a meeting of the American Sociological Association, he investigated 3,819,923 mortgage applications that were sent out in 2006. Overall, he found that about 40 percent were denied, about 54.6 were permitted as prime loans, and 5.4 percent were accepted as subprime loans. He then began to monitor these numbers with respect to the race of the borrower. Faber found that Blacks were 2.8 times more likely to be denied a loan than whites, while Latinos were 2 times more likely to be denied, and Blacks and Latinos were also 2.4 times more often given subprime loans when they were approved.⁶ The mortgage lenders enacted the “reverse redlining” that became so prevalent in the years coming up to the 2007-2009 financial crisis.

The subprime mortgage crisis had its greatest effects in predominantly Black areas, such as Prince George’s County. This county right outside of Washington D.C. reached a majority Black population in the 1990s, and has increased to 63% Black, 16% Hispanic, and 14% white today. When comparing foreclosure rates by people of different races with similar incomes in the D.C. region in a 2012 study done by Monica Potts, Black homeowners were found to be 20 percent more likely to lose their homes.⁷ These disproportionate rates continued all across the nation. Predatory lending encouraged the Black homeowners in this area to take out subprime mortgages by presenting it to them as their only option. The bursting of the housing bubble affected areas such as these with dramatically increased effects. Overall, the median United States housing price fell from \$247,900 to \$216,700 from 2007 to 2009. In Prince George’s County the median housing price fell from \$343,000 to \$245,000. The difference between these two drops

is almost \$70,000. The evidence clearly illustrates the dramatic effects of discriminatory subprime lending in predominantly Black and Hispanic areas.

The discriminatory effects of the subprime mortgage lending industry only increased with income with high-earning Blacks losing their houses about 80 percent more than whites with similar incomes. This shaped areas similar to Prince George's County, which is the highest-income majority-Black county in the United States, to bear the financial brunt of the crisis. The financial crisis seemed to affect these high-income Black households more than any other faction of society due to the prevalent discriminatory mortgage lending. Even though these more wealthy Black homeowners had the required assets, down payment ratios, and credit scores, mortgage originators still forced these subprime loans on them. According to a study done by Algernon Austin, 6.2 percent of whites and 21.4 percent of Blacks received high interest loans, and this was strictly monitoring whites and Blacks with a credit score of 660 or higher.⁸ While the Black borrowers may have qualified for a higher-quality prime loan, the banks and lenders that provided these loans still only supplied them with subprime mortgages. A 2009 New York Times article references an analysis of the mortgage lending in New York City that discovered that Black households that made \$68,000 annually obtained high interest subprime mortgages 5 times more often than white households with similar or lower annual incomes.⁹ Many companies actually supplied their mortgage lenders with cash incentives to provide subprime loans to minority communities, and they also provided bonuses to those who secured a subprime borrower that could have qualified for a prime loan. Subprime loans allowed lenders to assign higher interest rates as a sort of safety net for the lender, and they also were able to assign the adjustable-rate mortgages to subprime borrowers. In the New York Times article, one of the highest-ranking and performing subprime lenders at Wells Fargo stated that lenders would often cut and paste credit reports from one customer onto another. The article also concludes that obtaining a subprime loan could mean \$100,000 more in interest payments than a traditional loan for a mortgage of \$165,000. Having a subprime loan forced onto a household meant significantly higher payments, even though these rates might have been disguised by a teaser rate. Another study done by Algernon Austin determined the percentage of subprime loans used in the purchasing of a home by race, and their results were that 26.1% of whites obtained a subprime loan to pay for a home, while the number was 47.3% for Hispanics and 52.9% for Blacks.¹⁰ Credit scores simply cannot be the major factor in these results because of the extensive and unmistakable gap between the races. A study by the Center for Responsible Lending reaffirms this by measuring subprime lending in different races, while taking into account the predominant element in lending, such as credit scores. The study found that, even while taking into account these factors, Blacks and Hispanics were 30% more likely to receive a high-interest subprime loan.¹¹ Individual prejudice also played a large part in the discriminatory actions of mortgage lenders with lenders around the country often referring to Black borrowers as "mud people" and to subprime loans as "ghetto loans."

As interest rates on their mortgages rose and the prices of their houses fell, Black borrowers found themselves without viable means to pay off their loans. They quickly fell into negative equity on their homes, and the biggest factor to take into account here is that the home is usually by far the highest-priced asset a homeowner possesses. An article written by Gwen Sharp used data that measured the percentage that each major asset holds in the net worth of the average household in 2002, and it illustrated that equity in homes made up 41.7 percent of the total net worth¹², and according to a study by the Center for American Progress, in neighborhoods with high Black concentrations since 2013, home prices decreased by 6 percent from 2006 to 2017, while home prices in predominantly white areas increased by 3 percent.¹³

A research study done by the Pew Research Center found that between 2005 and 2009 the net worth of Black families fell by 53 percent, while white families' net worth declined by an average of 16 percent.¹⁴ Shown in a Federal Reserve study done on their 2019 Survey of Consumer Finances, these effects continued after the subsequent recession with Black families' net worth dropping by 20 percent from 2010 to 2013, while white families' net worth remained essentially the same.¹⁵

The racial wealth gap increased to horrifying levels in the wake of the subprime mortgage crisis with Blacks losing significantly higher percentages of their overall wealth than whites. According to research done by the Pew Research Center, while the white-Black wealth gap actually improved in the years after the financial crisis up to 2016

for lower-income families, it worsened for middle-income families, and it became extremely exacerbated for higher-income families that experienced the greatest inequality in the aftermath of the crisis. In 2016, the average black household had a net worth that was one-tenth (\$17,100) of the average white household, which made \$171,000. This disparity is larger than in 2007. Hispanic households held a median wealth of one-eighth of the median white household, and this was about the same as the gap was in 2007.¹⁶

Black individuals in the United States were already being constantly discriminated against in every aspect of society in the years leading up to the financial crisis with an unemployment rate of 10 percent in 2008, which was more than twice the rate for whites. With the crash of the subprime mortgage market and subsequent Great Recession, Black families were disproportionately experiencing the worst effects of the financial crisis. The long-standing effects that the market crash created are doubtful to ever be completely restored. The subprime mortgage crisis is a permanent scar in the United States' society, and the minority families who were directly taken advantage of and impacted by the event will still be economically disadvantaged for many years to come.

The Role of Investment Banks and the Subprime Mortgage Bond Market

The central factor of the subprime mortgage market crash that allowed the failure of subprime mortgages to bring down the entire United States financial system and cause a global economic crisis was the creation and trading of subprime mortgage bonds. These assortments of home loans are investments that are almost identical to conventional bonds, and they created a system in which the bank is an intermediary in between the borrower and the investment industry. In the years preceding the financial crisis of 2007-2009, mortgage originators made loans to homeowners, and then, they sold off these loans to banks who exclusively combined the mortgages to form a mortgage pool or mortgage bond. The banks then found another party to sell these bonds to for a profit. The individual or organization that bought the mortgage-backed securities from investment banks and other financial institutions was essentially providing mortgages to the borrowers. Eventually, many alternative types of mortgage bonds were created, but for all mortgage bonds one rule remained more important than any other. Mortgage-backed securities were only as safe as the mortgages that made them up. This rule became more and more shielded and less considered as the mortgage bond industry boomed and investment banks looked for ways to generate as many profits as possible, without regard for the destructive outcomes of their creations.

The subprime mortgage crisis identified many severe flaws in the financial system, and one that stood out almost above all others was the potential for disaster that financial organizations outside conventional banking systems created. These institutions are not restricted by regulatory oversight as they act as intermediaries aiding in the supply of credit around the world. Many companies that were pivotal in the financial crisis of 2007-2009 are classified as shadow banks, such as investment banks and mortgage lenders, and even though the crash created higher awareness for the risk of this sector of the financial industry, the shadow banking sector grew in size at exceptionally high rates in the years following the crisis. The majority of institutions that are identified as shadow banks are non-banking financial companies (NBFCs), which are organizations that provide financial banking services without a banking license. What sets these organizations apart and allows them to avoid federal and state regulatory surveillance and restriction is that they are typically not allowed to take conventional demand deposits, such as checking or savings accounts. NBFCs do not rely on traditional banking as their major source of credit. They look to various sources of funds, such as borrowing from other banks, their own investors, and bond trading and investing. Usual federal and state regulations are established with the intent of protecting the financial sector against potential crises, crashes, and bank failures. These rules regularly involved capital reserves and liquidity requirements that banks were expected to meet. Without the financial regulations restricting them, many institutions took considerable risks in the subprime mortgage market, and a large number of them were eventually met with extreme breakdowns and bankruptcy due to the role they played in the financial crash. Some of the major shadow bank players in the subprime mortgage industry that fell into failure or near-collapse as the economic catastrophe occurred were the insurance company American International Group (AIG) and the investment banks Lehman Brothers and Bear Stearns.

While shadow banks were constantly in competition with the conventional commercial banks, there was a significant overlap between these two sections of the financial sector because many major banking institutions owned shadow banks and the two divisions often worked closely together. Shadow banking institutions could not depend on the traditional federally insured deposits that other banking organizations used for funding, so these companies often acquired their money from short-term funding. This form of amassing capital is referred to as wholesale funding.

These forms of amassing funds stimulated the shadow banking sector through the attractiveness of potentially higher returns and the less expensive fees. Many commercial banks also took advantage of this method of gaining capital, and it seemed to benefit all sides of the agreement. If the institution that a wholesale lender loaned money to failed, they could simply collect the collateral that had been put up in the deal. With the ability to collect funds through wholesale funding and other more-reliable, longer-term methods, these shadow banks were able to operate in similar ways to the traditional sector of banking while not conforming to the same restrictions and requirements that other banks were subject to. They were able to take part in investments that were restricted to the traditional banking system because of increased levels of risk. This gave shadow banking organizations a much wider range of potential profits. By the crash of the subprime mortgage market, the shadow banking sector was providing higher levels of credit to the homeowners and organizations of the United States than the conventional banks that they had been born from. Access to heightened levels of risk would eventually overwhelm the shadow banking sector, and the banking institutions would find themselves in desperate need of financial attention and assistance from the regulating authorities that they had so desperately and successfully stayed out of reach from.

The mortgage industry has significantly changed in the decades before the subprime mortgage crisis. The industry used to be a great deal more personal and local. Mortgage lenders often knew their clients and spent large amounts of time on each deal, and after the deal was made, the bank would back the loan with its own funds and hold the mortgage on their books. This structure of mortgage lending was beneficial in the fact that banks inspected and researched their potential clients to guarantee that the bank would have a very miniscule likelihood of losing money on the deal. This lending strategy had significant flaws as the process was often quite tedious and time-consuming with a low efficiency, and banks were also completely dependent on their deposits, which allowed for a limited number of borrowers. Since mortgage lending was frequently enacted in the local area of the bank, mortgage originators were often subject to drops in housing prices in their zones of mortgage lending.

Then came the advancement of mortgage lending that allowed the process to become more efficient and less personal, the popularization of mortgage-backed securities. With these new innovations, mortgage lenders were able to grant amounts of mortgages that were only limited by the amount of potential borrowers that the lenders could acquire. As soon as they made the loan, lenders had the ability of selling the mortgage to different organizations that dealt in the formation of securitized mortgages. They then freed up the money to supply more mortgages, which they would continue to sell to a third party for a profit. These investment banks and other organizations that bought the mortgages from the lenders compiled and securitized these loans to create mortgage-backed securities (MBSs), which are forms of assets-backed securities (ABSs) that exclusively contain mortgages. The investment banks could then sell the securities to another party or keep it for potential profits.

In the formation of the mortgage-backed securities, the mortgage market reached over complicated measures that resulted with the overwhelming majority having little to no idea of what was happening inside the industry. Investment banks structured these securities to attempt to reduce risk by merging mortgage loans from separate sections of the nation, which provided a safeguard against a drop in real estate prices in one zone drastically affecting the value of a security. Two primary styles of MBSs existed in the financial world. The first was the pass-through security, which is the simplest structure of a MBS. The pass-through is structured with an intermediary that collects interest and principal payments and dispatches them to the investors that hold the pass-through security. This style of mortgage security is formed as a pool of fixed-income securities that is financed by a bundle of assets. A fixed-income security is an investment in which the return is a fixed amount for the entire lifespan of the security. The principal payment is recovered at the end of the security. The purpose of this kind of security is that the investor will know the exact amount

of income that he will receive throughout the life of the investment, but therefore, the rate of return is generally lower than securities that vary in income.

The second of the major forms of MBSs is the collateralized mortgage obligation (CMO), which is typically a pool of mortgages that is sold as an investment. These securities are divided into separate sections, which are commonly referred to as tranches. Each tranche in a MBS contains a different mix of assets, and each of these pieces of the security were accredited different risk ratings by credit rating agencies, such as Standard & Poor's (S&P) and Moody's, based on the potential for defaults by the borrowers. Tranches were often composed of mortgages with similar features, such as interest rate, principal balance, and the life of the loans, so the assets in separate tranches were often distinctly disparate. These diverse segments of securities were sold individually to investors, who had the ability to choose which risk level they would like to invest in. In the case of defaults, the senior tranches were repaid first, while the junior tranches were repaid second if possible. This form of securitizing mortgages and separating them into distinct portions with different levels of risk became a popular finance strategy for investment bankers to employ. A metaphor that's often used to describe a mortgage security with many different tranches is a flooding tower. Each separate tranche in the bond is a floor in the tower with the lowest floors being the highest risk tranches. If defaults become prevalent in the security and the tower begins flooding, the lowest tranches or floors are flooded first and their owners lose their investments first. The entire mass of mortgages would have to default in order for the entire tower to flood, the security to completely lose its value, and the safest tranche of mortgages to become worthless.

As subprime mortgage bonds became more and more popular, the actual securities grew to become significantly more complex and arcane. The range of assets that were compiled to make up the securities was growing at an intense pace. As the complexity of the field of assets intensified, there was a decreasing number of people who actually understood what made up these securities. It quickly came to the point where the parties that bought the MBSs from the shadow banks were relying completely on the security ratings that were provided by the credit rating agencies. Investment banks dedicated themselves to designing a system in which they could exploit their customers through taking advantage of the credit rating agencies to create bonds that appeared to be of higher quality than they actually were. From this scheming, the collateralized debt obligation (CDO) was reborn. This intricate financial instrument was most simply described as a security that was backed by a collection of loans and other assets. These instruments were originally created in 1987 by the investment bank Drexel Burnham Lambert, but they were largely ignored until their explosion in popularity in about 2003. This eruption of buying and selling CDOs stemmed from investment banks realizing the potential for a CDO backed by subprime mortgage loans. While this subprime CDO seemed to be backed by a diverse portfolio of stable assets that canceled out each others' risks, these bonds were actually almost always entirely composed of subprime mortgage loans. The defining characteristic of these subprime CDOs is that they are made up by bond creators essentially taking the worst-quality, lowest-rated tranches of mortgage-backed securities and compiling them into a new bond, which they called the synthetic subprime mortgage bond-backed CDO. They then sent this new bond to the credit rating agencies for rating the level of risk for the bond. This is where the highest amount of disgusting corruption and greed comes into the subprime mortgage bond market. A major factor to take into account with these credit rating agencies is that they were paid large sums of money by the investment banks to rate the bonds, and the investment banks did not have to accept the first rating on a security that they were given. Shadow banks thereby had the ability to exploit and take advantage of the rating agencies by providing them with these collateralized debt obligations to rate, but if they were not satisfied with the ratings that the agency assigned to the bond, they would simply go to the next agency. The next agency would then see that the investment bank would not pay them to rate their bond if they did not prefer their ratings to the other agencies. If the investment banks did not accept their rating on the bond, the credit rating agency would lose customers and potential dealings, and the bank would simply move onto the next agency that would give them what they wanted out of fear of losing possible profits. It came to the point where credit rating agencies were so frightened by the possibility of losing their investment bank customers that they assigned credit ratings to the subprime mortgage bonds that they knew were completely false and misleading. Three dominant credit rating agencies reigned over the financial sector during the years leading up to the financial crisis of 2007-2009: Standard & Poor's, Moody's Investors Service, and Fitch Ratings. The agencies usually

pronounced 80 percent of the new subprime bond as triple-A, which is the highest rating possible. The investment banks could then take the 20 percent that were not rated as AAA, and add them into a new CDO that had yet to be rated by credit rating agencies. The agencies would then rate 80 percent of that tower of bonds as triple-A, and the process would continue. As the bonds declined in quality, the collateralized debt obligations would continue to be rated as the highest possible rating, and the investors that bought tranches in these CDOs would continue to be misled about the risk that they were actually taking on with their investments.

Working in the mortgage bond trading department in a major investment bank was an extremely coveted position. These traders had the potential to make insane amounts of money in the trading of these enormous securities. Many people attempted to reach the highly desired mortgage bond trader desks, but only so many could acquire the jobs. A typical job for those who were not educated or proficient enough to work in the trading of mortgage bonds was working in a credit rating agency because of the high correlation between these two industries. This resulted in many of the credit rating employees having a severely limited understanding of what was actually happening inside these bonds that were designed to hide their most vital elements. They couldn't perceive or explain these securities, and they definitely did not understand these bonds to the levels that would be required to assign a competent risk rating to them. Those that actually grasped the inner workings of the mortgage bond market went into the trading departments of investment banks with the desire to earn massive amounts of money. There was simply so much more money to be made in the mortgage bond trading sections of shadow banks than in the credit rating departments of organizations. This obviously seems to be a definite and obvious flaw in the financial industry because the work that a credit rating agency does has a far larger effect on the market than the work of a mortgage bond trader. The risk rating that is attributed to a bond essentially decides the desirability and the value of the security, while trading bonds has little to no effect on the overall market. A strikingly large number of those that accredited the mortgage bonds had little to no idea what they were actually doing, while their work was progressively becoming the only determinant that investors scrutinized.

In the first years of the popularization of mortgage bonds, the intent of bond creators was to eliminate risk in these bonds by forming securities from different risk loans from all around the country. Now, mortgage bond traders and creators were being paid huge sums of money to base their work in the mortgage bond industry around masking the risk from the parties that bought the bonds from them. Those that worked in the mortgage bond departments in major investment banks no longer dedicated themselves to creating conventional mortgage bonds with separate levels of risk. Their new purpose was to acquire the thin, riskiest levels of subprime mortgage bonds and compile them into new CDOs.

Now that the investment banks had a subprime CDO that was completely compiled from shaky, low-quality bonds, the entire system of the mortgage bond industry was changed forever. They could now trick their customers into buying low-quality bonds that appeared to be the safest bonds on the market. The game became based around creating the most complex and arcane bonds possible so that the borrowers would completely rely on the ratings that the agencies would assign, and the investment banks had the credit rating agencies under their control the entire time. This was a goldmine for the investment banks because they could essentially turn their worst products that they had the most difficult time selling into their most popular products. This CDO machine turned 80 percent of their most low-quality, least popular securities into the most popular subprime mortgage bonds, and the banks held the leftovers to compile and re-rate into 80 percent high-quality. It was the easiest source of income for the shadow banks, and it all stemmed from exploitation of the customer. The comparison for mortgage bonds that had described so many securities up to this point no longer made sense. All floors of the tower that made up the CDO were at the same level of vulnerability to flooding, and the level of risk was so incredibly high that even the slightest stall in home prices could mean catastrophic consequences for the owners of these subprime collateralized debt obligations.

As a result of these new styles of bond creation, banks and their mortgage bond departments thought up many other ways to ensure that a high percentage would be re-rated as AAA. They seemed to come up with an endless supply of strategies to take advantage of the credit rating agencies and the parties that bought the subprime mortgage-backed securities from the shadow banks. Wall Street mortgage trading departments quickly discovered another potential

exploitation in the credit rating agencies' models. One of their most easily manipulated and profitable was centered around the FICO scores that the major rating agencies took so deep into account. FICO scores ranged from 850 to 300, and the median in the United States was 723. While these ratings could be easily exploited by simply taking out a credit card loan and promptly paying it back, the real capacity for taking advantage of the credit rating agencies was in that the agencies simply asked for the average FICO score for a mortgage bond instead of the complete list of the borrowers' scores. Only requiring the average score allowed the investment banks to create barbell-shaped loan pools. These pools were compiled from very low and very high FICO scores, and they were designed to present an average of around 615, which was the lowest requirement for the bond to be rated as triple-A. These barbell loan pools were far simpler for mortgage bond creators to form, and they contained far higher risk ratings. A pool filled with half very low FICO scores and half reasonably high scores was far perilous than a loan pool made completely up of FICO scores of 615. The only slightly difficult aspect of creating a barbell-shaped loan pool was finding the high FICO score borrowers, but the mortgage bond trading desks quickly found a way around this complication. When checking FICO scores, the credit rating agencies did not take into account the extent to which the mortgagors had borrowed. Shadow banks soon realized this and stocked their barbell loan pools with mortgagors that possessed "thin-file" FICO scores. This category of scores were scores that were made up from a very short history of borrowing. Those who had never acquired a loan and therefore had never failed to pay back a loan regularly had profoundly high, "thin-file" FICO scores. This permitted investment banks to create barbell-shaped loan pools where even the highly-rated borrowers had a high chance of not being able to repay their debts.

While the majority of the players in the subprime mortgage market either ignored the potential for catastrophe in their industry or were completely oblivious to it, a small percentage of people grasped the concept that the housing bubble that the mortgage market had created would eventually burst and at least the riskiest of these mortgage-backed securities would drop in value. This miniscule amount of competitors in the market were determined to discover a way to earn money by betting on the surety of this fallout. The modern credit default swap (CDS) was born from the tenacity and persistence of these investors. This new instrument is a financial derivative that an investor can buy from another investor or financial institution that allows them to swap or negate the credit risk of a fixed income product. These contracts last a certain amount of time and include a set of regular payments from the buyer of the CDS to the seller. Once an investor has acquired a CDS, the seller of the contract takes on the risk of the bond or security that the investor typically owns a segment or all of. In exchange for regular premiums, the seller would lose the money that the investor would have risked if the security falls in value. CDSs were often used on debt securities in the years leading up to the financial crisis. Due to their long maturity, investors found themselves in a difficult position to speculate when the risk would become too much to handle, so these contracts became a very popular way to ensure that the investor wouldn't lose large amounts of money. Until the maturity date or credit event came to pass, the buyer of the CDS would make regular payments, and if the security was overcome with defaults, the seller would pay the investor the value of the bond and all of the interest payments that would have been made up to that date.

The CDO was originally created in the mid-1990s with the intent to transmit commercial loan credit exposure and release capital in banks. These contracts were quickly modified to be used for bonds, but they were generally used in municipal and corporate securities. While they were constantly growing and transforming, these contracts stayed quite simple and close as essentially all parties that were involved in the financial transaction were aware of each other and had become acquainted with each other. All participants in the creation of the CDS were fully aware of each aspect of the contract and the risk that each party was taking on. Then, credit default swaps undertook a dramatic transformation in the early-2000s to become fundamentally more opaque and complex with an increased amount of parties involved in the contract. CDSs started to be used in mortgage-backed securities, asset-backed securities, and other forms of bonds and securities that were so coveted and pivotal in the lead up to the subprime mortgage crisis. A new style of handling credit default swaps was also introduced as speculation became widely used in the subprime mortgage industry. Speculation was a form of CDS transaction that involved parties that had absolutely no connection to the assets that the risk of the contract was based on. The buyer of the CDS did not have to actually obtain the security that the contract was centered around, and the system became about two parties simply betting on the outcome

of certain bonds. In earlier years, the buyer of the CDS was entering the contract so they did not have the risk of losing large sums of money, but in this new form of CDS dealing, the buyer was entering a bet with the dealer so they could earn substantial profits.

In the first few years of the utilization of credit default swaps in the subprime mortgage industry, they were simply a consistent money producer for the sellers of the contracts. No one could accurately predict when the housing bubble would burst and real estate prices would plummet. They simply knew that according to the laws that governed the financial market, such as the laws of supply and demand, the crash would eventually occur. The industry giants that insured these CDOs essentially sat back and watched the premium payments consistently come in, and they grew confident in the abilities of these ABSs. By the end of 2007, the CDS industry had grown to about \$60 trillion in global business. In the months before and during the financial crisis, the risks were obvious, and the investment banks and hedge funds that had bought and insured so many risky collateralized debt obligations and mortgage-backed securities realized their faults and started buying drastic amounts of CDSs on their bonds. These companies had dug themselves in such deep holes that only bailouts could save them as the subprime mortgage market crashed to the ground around them.

The rebirth and utilization of CDSs resulted in the growth of a new product. The synthetic CDO is another form of a CDO that instead of holding cash-gathering assets such as subprime mortgages invests in non-cash derivatives such as CDSs and options. These financial instruments produce their value from non-cash assets that typically depend on the performance of another financial product. The premiums from credit default swaps is one example of the ways that income is produced for a synthetic CDO, while the income for a typical CDO would come from conventional cash assets such as mortgages. These products dramatically increased in popularity due to their shorter life spans than CDOs. Synthetic CDOs are separated into tranches that each hold different credit risk levels, and investors have the ability to choose which risk level they would prefer to invest in. Just as in MBSs, the lower, junior tranches carry higher risk with higher potential returns, and the senior tranches hold lower risk and lower returns. The typical synthetic CDO payment's greatest determinant was the occasion of a credit event on a CDS, in which the owners of the synthetic CDO would become responsible for paying the buyers of the credit default swaps. The payment that stemmed from those that held the synthetic CDO would begin with the investors that owned the lowest tranches of the synthetic CDO and continue upward. Just as the buyer of a CDO becomes responsible for the potential defaults on the subprime mortgages, the buyer of a synthetic CDO is the party that is responsible for the long side of a collection of CDSs. When buying a CDO, the buyer is taking the side of the bet that relies on the underlying assets performing well for as long as they hold that security. When buying a synthetic CDO, the buyer is assuming that the CDOs that the CDSs are based around will stay profitable and reliable, but if the CDOs decline in value, then the buyer of the synthetic CDO is stuck with paying those that bought CDSs on the CDOs. A synthetic CDO is simply another form of taking a bet on the eventual profitability of a financial instrument such as a CDO, except to extremely higher degrees than previously possible. Just as mortgage loans were pooled to create mortgage-backed securities, credit default swaps on securities were pooled to form synthetic CDOs. With the introduction of speculating in the CDS industry, as long as a party could be found that was willing to take the long side of the bet there was a potentially unlimited amount of these synthetic derivatives to be fashioned in the financial markets.

This creation only increased the credit exposure to the crash of subprime mortgage value for all the financial institutions and investors of the United States and a large portion of the rest of the globe. Before the introduction of the credit default swap and the subsequent production of the synthetic CDO, the amount of people and organizations involved in the mortgage bond industry was limited to the amount of mortgages that the market could be supplied with, but as speculation in the CDS market began to run rampant and CDSs were pooled to create synthetic financial products, the exposure to these risky underlying assets was vastly spread across the nation and world. Financial instruments became more and more arcane with the profitability relying on assets that relied on another set of assets, and there were many different levels of complicated assets that were created by investment banks to shield the investor from the risk that they were actually assuming. These synthetic CDOs quickly became a huge component of the financial markets as they were cheap to create, and they took a significantly smaller amount of time to produce than

typical collateralized debt obligations. Many experts on the subprime mortgage crisis have accredited synthetics as one of the greatest reasons of why the fallout of a market that was comparably quite small was able to bring down a nation's entire economy and cause enormous financial damage around the world. These products were extremely popular because they didn't require a single new homeowner to be provided with a mortgage. Synthetic CDOs could be based around already existing subprime mortgage bonds and CDOs, and it didn't matter in the least who these securities actually belonged to. They were simply only restricted by who was open to taking the other side of the bet. These new financial instruments also allowed for new levels of concealed exploitation by shadow banks as they supplied investors with CDOs and other subprime mortgage bonds while they secretly bought CDSs on the same securities and bet against the bonds that they were providing their customers with.

What was eventually taken into account when dealing with these credit default swaps was the extent to which a great number of the largest players in the investment banking industry had invested in the subprime CDOs and other mortgage backed securities. These organizations supplied the overwhelming majority of credit default swaps, but no one realized that these banks that everyone had always thought of as "too big to fail" might actually fall into bankruptcy and not be able to pay back their debts on CDSs. This would occur if the borrowers whose loans made up the subprime MBSs and CDOs defaulted at the same time as the seller of the CDS defaulted. This eventually became one of the leading causes of the credit crisis that resulted in the Great Recession. Shadow banks that had become so involved in the mortgage bond market before the financial crisis, such as AIG, Lehman Brothers, and Bear Stearns, had invested exceptionally high amounts of money into the subprime collateralized debt obligations that they had also supplied so many speculative people with CDSs against. The extent to which they had sunk their capital into these bonds caused their entire financial system to crash to the floor without any cash to pick themselves back up. By the time that the invincibility of the rise in real estate value was broken, the organizations that had generally provided CDSs stopped, and the investment banks could not buy enough credit default swaps to ensure a significant portion of their financial assets. The firms that had provided so many CDSs in the early 2000s had failed to put up any reserves or initial collateral, and due to the fact that they had also neglected to hedge their risk, they and their customers were completely susceptible to the crash in value of subprime mortgages. The ratios of cash in subprime CDOs to cash in CDSs were extremely one-sided. In March 2008, Bear Stearns held \$40 in subprime mortgage bonds for every dollar that they had bet against those same bonds. After the housing prices finally crashed, these major financial institutions were no longer able to pay back their many CDS obligations. CDS investors became aware that they could be pulled under by the link that connected them to these major investment banks, the credit default swap. If these financial institutions went bankrupt or close to it, they wouldn't be able to pay back the debts that they had incurred with the selling of CDSs to investors. This quickly became a point of panic with those that had bought large amounts of insurance on their bonds and speculated with other securities. There was a fairly high chance that if one had dealt with a major corporation in the CDS market they could never receive their payment and had just wasted months or even years of cash on CDS premiums. Borrowers defaulted as the providers of CDSs defaulted and the buyers of CDSs found themselves in such a good position on the bet that they lost money. The prime and knowledgeable CDS buyer wants a huge economic failure in the subprime mortgage market, but they don't want a complete collapse. In the event of a huge failure, the CDS buyer is paid large amounts of cash for the bet that they took and the investment banks take a substantial hit and require time to recover. In the event of a complete collapse, the investment banks reach near-bankruptcy or go under and everyone loses their money. Speculative CDS buyers quickly went from hoping for a huge economic fallout to desperately wishing for a more stable economy.

Arguably one of the most extreme cases of a financial institution that took the wrong side of the bet in the CDS market was the insurance company American International Group (AIG). This company was a major fixture of the insurance industry with major financial institutions everywhere around the globe holding sizable portions of stock in AIG. It was largely considered a profoundly safe insurance company, but in the Financial Products division of the organization (AIGFP), a new means to supposedly expand the profit margin was discovered and put to use. AIG began to insure enormous amounts of subprime collateralized debt obligations through CDSs. AIG thought that the margins of default on these subprime loans would be miniscule, and therefore, they treated the CDS market as an expansion

of the insurance business. Up to this point, AIG had dealt in safe, long-term, highly predictable products, such as life, car, and home insurance. Their decision to risk their cash gained from people's insurance policies to invest in perilous and unpredictable products that their employees in their Financial Products division knew almost nothing about was considered one of the worst resolutions of the financial crisis of 2007-2009. Unlike other financial institutions that were involved in the subprime mortgage bond industry and CDS market, AIG invested completely on the side of selling credit default swaps. They never bought these contracts, so when the housing prices fell and the mortgages that formed the bonds defaulted, AIG found themselves in a situation where they had massive sums of money to pay while they were receiving nowhere near the amount of cash needed to pay off these debts. In the fourth quarter of 2008, AIG recorded their largest corporate loss with a net loss of \$61.7 billion, which was not announced until March of 2009.

In September of 2008, the Federal Reserve supplied AIG with an \$85 billion two-year loan, and they received 79.9 percent of AIG's equity in the deal. This allowed them to make their desired changes in management and gave them power over essentially all of AIG's decisions. This bailout package fundamentally changed throughout the years, and by April 2009, the bailout totaled at \$182 billion. Miraculously, AIG pulled through the financial crisis and began to recover their profits. In 2012, the Treasury Department of the United States' government sold its final stakes in AIG for a profit, and the U.S. government ultimately concluded its oversight on AIG in 2017.

The lenders that initiated the eventual financial crisis viewed the subprime mortgage market as a stable and profitable source as long as housing prices continued to rise. Everyone involved in the process, from the mortgage originator to the organization that pooled the loans into a mortgage bond to the rating agency that evaluated these bonds, were able to secure profits from this industry because of the liquidity of the mortgage bond market and the gradual increase in housing prices. With these factors controlling the real estate market, the mortgage originators just required a continuous stream of available borrowers to take advantage of their resources. As the housing prices rose seemingly unendingly, people took constantly increasing housing values for granted, and they began to purchase houses with mortgages only to sell them as soon as prices went up. This was a very easy and profitable action that a borrower could take, as long as the values of homes would continue to peak. While everyone knew these prices couldn't rise in perpetuity, there was no definite way to predict when they would fall, so investors took advantage of the rising rates while they could.

The detail that was largely ignored throughout the development of the subprime mortgage market was that housing prices didn't even need to drastically fall to cause default on a huge percentage of the subprime loans that a large portion of were just starting to lose their teaser rates and shoot up in interest payment requirements. They simply needed to stop rising so quickly, and this would inflate the housing defaults that had been slowly rising in the few years before the subprime mortgage crisis. Default rates were already at 4 percent in November of 2005, and a small stall in housing prices would be enough to bring them to 7 percent, which is what was required to cause the values of the highest-risk, lowest-quality subprime mortgage bonds to drop to zero. Triple-A rated collateralized debt obligations that had been created from Triple-B rated subprime mortgage bonds would lose their entire value. This was only known to a few people inside the mortgage bond industry that had decided to go against the general direction of assuming that housing prices would continue to rise and ignoring the possibility of an entire subprime meltdown that would bring down the nation's economy.

The Impact of the Subprime Mortgage Crisis on the United States and American South

The American South has consistently remained the poorest and most poverty-stricken area of the United States, and it has been largely ignored instead of being recognized as an urgent economic problem that should be addressed. In a study using data from 1990 to 2019, the South held 54.9 percent of all Americans living in poverty, while only containing 38 percent of the U.S. population, and it encompassed more than 80 percent of counties with persistent poverty issues in the U.S.¹⁷ Ever since being identified as a major economic problem in the U.S. by President Roosevelt, the

southern economy has made great progress, but it still remains the U.S. region with the highest poverty rate and lowest median household income.

The Great Recession formally began in 2007 and ended in 2009, but the effects of this financial crisis began earlier and ended far later. The subprime mortgage crisis destroyed consumer confidence and trust in banks, and the entire country and a large portion of the world entered a state of constant economic downturn. Foreclosures spiked and continued at extremely high rates. Housing prices took a sharp dive, and millions of Americans were forced to give up their homes and potentially leave their communities in search of areas with more economic opportunities. The most movement was contained to the West and South of the United States where masses of individuals traveled in search of cheap housing that they could afford even after being taken advantage of in predatory lending practices and finding themselves left with extreme debt and even worse credit scores and histories than when they first received subprime mortgage loans. There was no point in leaving the entire South or West for the regions such as the North because the crisis had been so widespread, so the movement was generally local.

The West was so greatly affected by the economic meltdown because of the sharp economic growth that it had been experiencing in the years leading up to the crisis. Increases in population and growth had characterized major metropolitan areas in the West, and in expectation of further growth, thousands of unneeded homes were built to accommodate the influx of families who came in search of opportunities. When housing prices fell, the American West lost large amounts of money that was invested in real estate, and the growing western economy was jolted by the financial crisis that left many of its investments without value.

Due to its already lowered and troubled economic position, the South was greatly damaged in the subprime mortgage crisis. Poverty had already plagued the southern states, so when subprime mortgage loans became available to the population, an intense amount of southern individuals applied and received these predatory, subprime mortgages. When the teaser rates ran out on the ARMs and the consistently high interest payments on other subprime mortgages finally overwhelmed the subprime borrower, millions of Americans fell into financial trouble and were forced to move locally. Another factor that magnified the negative impacts of the financial crisis in the South was that it contained the largest portion of the Black population out of all the U.S. regions by a great amount. As of 2010, the South held 55 percent of the African American population, while the West, Midwest, and Northeast altogether contained 45 percent of the Black population in the U.S.¹⁸ Residential segregation has been proven to increase the rates of predatory lending, and when mortgage originators realized the potential that highly segregated areas had for exploitation, they didn't hesitate to provide these majority-Black communities with high-rate, low-quality mortgage loans that eventually forced them into foreclosure or extreme debt. Because the South retained such a high percentage of the American Black population, when the housing bubble burst and Black individuals were affected to a much higher degree than any other ethnicity, the South was pushed even further into poverty. The devastating impact on Black individuals in the South wasn't a zero sum game in that U.S. region. Whites increasingly suffered as African Americans endured the economic downturn that rested on their backs. The economic fallout and subsequent rise in poverty that attacked the U.S. regions was most highly concentrated in areas with either booming housing and economic growth, a large Black population, or a high rate of poverty. The American South was characterized by two of these three elements, and the West was defined by the other, its prosperous economic growth and extensive expansion of housing. The South was already in the lower portion of U.S. regions in many major fixtures of society, such as health outcomes and education, and when the subprime mortgage crisis hit, it drove the poverty-stricken region even farther down the economic ladder with cascading effects that still affect the area today.

The impacts and restorations of the subprime mortgage crisis were largely decided by economic class as the average losses in the Great Recession and the necessary time needed to recover were often lower the more wealthy the individual or family in question was. While this may have altered by region, state, or many separate societal elements, overall, the richest families were able to recover the quickest of all economic groups, while the poorest were forced deeper into poverty. In many areas of the United States, this wasn't completely accurate as the wealthy Black families in the richest, majority Black area in the nation, Prince George's County, were arguably the most affected demographic in the entirety of the United States, but it is almost undeniable that wealthy families normally are able

to recover faster than low-income families. Prince George's County is a special case due to the increased effect of the subprime mortgage crisis on Black populations. Overall, rich, American families lost more than lower-income families in total wealth, but that is largely due to how much more wealthy families had to lose. The major factor to take into account is that these poverty-stricken families in areas such as the South are less able to lose money and remain financially stable. They cannot recover from recessions as efficiently as high-income families. The American South has consistently remained the least wealthy U.S. region, and after the effects of the Great Recession spread to every corner of the United States, the South took one of the greatest hits with spiking unemployment rates and falling median household income.

What should be taken into account is that the West was one of the most profitable and economically prosperous regions of the U.S. The western region had the resources and funds to eventually pull themselves out of the crisis and reverse the cascading impacts that the subprime mortgage crisis had on its individuals and housing market. The American South had no similar funding or financial attention to lean back on in the years after the subprime mortgage crisis. It has been predominantly ignored economically with respect to other areas of the United States, so unlike the West, it couldn't pull itself out of the economic meltdown that occurred everywhere throughout the United States. The South has been defined by the cascading effects from economic downturns and crises that have plagued their states more than any other region because of its original position as the least wealthy region and a government that is reluctant to address the monetary issues that deeply rest in the foundations of the region. There was no incentive to nurse an economically damaged South back to its original state as an impoverished region that provides very little economic output.

The South has also kept residential segregation and discriminatory practices in its society ever since the end of slavery and institution of many prejudiced policies, such as the set of laws labeled as the Jim Crow Laws that removed basic rights from the Black population in the South. African American individuals have been economically disadvantaged ever since the beginning of the United States, and this contributed to the ease in which mortgage lenders took advantage of residentially segregated, majority-Black communities.

The subprime mortgage crisis and recession essentially served to wreck every major fixture of society, from family life to crime to unemployment rates. The period of economic chaos that America and, specifically, the South and West underwent starting in 2006 and continued for many years, was characterized by the extreme economic stress that families felt and the desperate race to retain employment. This economic stress impacted the majority of family life by promoting insecurity and undermining the feeling of control that many individuals relied on in the household. Economic insecurity has even been linked to intimate partner violence, and while it is almost impossible to research and record, it is fair to assume that the Great Recession's rising foreclosure rates, falling housing prices, and financial breakdown that caused many families to lose their homes and "safe" investments might have resulted in an increase in domestic violence. Family structure in areas such as the heavily-impacted American South suffered dramatically, and increases in foreclosure and unemployment rates have also been connected to decreases in the national fertility rate. UC Berkeley Professor Daniel Schenider found that the national fertility rate declined by 0.67 percentage points for every percentage point increase in national foreclosure or unemployment rates.¹⁹

While the internal family structure has been speculated to have perilously affected during the subprime mortgage crisis and for many years after the official end of the recession, the larger, external community structure could have benefitted and experienced a neighborhood-wide bonding ordeal. Families and communities could have conceivably joined and connected over their similar losses and dreadful economic luck and position, which they had very little ability to change with the current economic climate.

Education has long been understood as one of the crucial, fundamental fixtures of society that has major effects on long-term success. The Great Recession compelled extensive education budget cuts, which resulted in thousands of newly-unemployed teachers and raised tuitions that forced many Americans out of an education. While many people are given the impression that the Great Recession's damage on elements of society such as education were short-lasting and quick to recover from, this is not the case with almost all the impacts of the financial crisis. Even in 2014, the state support for K-12 schools was lower than pre-recession levels in the majority of U.S. states.²⁰ Cities in

the West and South that took the brunt of the crisis were spending far less money on education than before the economic meltdown. U.S. schools that reside in high-poverty regions experienced the most dramatic cuts on school budgets due to their reliance on state government funding. In some hard hit areas, the only reasons that education budgets weren't further cut was the combined efforts of teacher unions to safeguard money set aside for schools. Almost 4 percent of the education labor force in the U.S. was let go as a result of budget cuts with about 300,000 public school staff members becoming part of the rising unemployed percentage of Americans. As assumed, those states that were more financially reliant on state taxes had the most difficult experiences in keeping education budgets high.

As with predatory mortgage lending, low-income, majority-minority districts were injured far more financially than high-income, white areas. Many people don't realize the extent to which race and discrimination play in policies and funding. Highly segregated areas with large Black and Hispanic populations have the least say in and minimal protection from certain funding policies and introductions of new, environmentally-damaging companies. Lawmakers were aware that they would experience the least amount of backlash if they concentrated their budget-cutting efforts in minority communities, and because these neighborhoods have always been exploited and their members are often not even aware of the extent to which they are constantly taken advantage of, the disproportionate layoffs of public school teachers was barely recognized. A study done by David S. Knight and Katharine O. Strunk concluded that in Los Angeles public schools 2 percent of white middle and high school students had their teachers let go and more than 4 percent of Black and Latino middle and high school students had their teachers laid off.²¹ Unpredictability in the education workforce also had severe impacts on teachers' abilities to educate their students. The increase in stress that came with the required layoffs in the years during and after the subprime mortgage crisis illustrated a decline in teaching performance, and this effect was worse with those that received layoff notices, even though they were never actually eventually let go. The Great Recession and the economic insecurity that it placed on almost every United States institution also served to lower teachers' satisfaction with their jobs. While it's nearly impossible to link the abrupt drop in contentment from 62 percent in 2008 to 39 percent in 2012 to the crisis, the 2008 financial breakdown is most likely what impacted the dramatic adjustment of this statistic.

The cutting of education budgets in seriously-afflicted states didn't solely influence the daily work and long-term results of teachers. Students were also greatly affected by the shrinking of their educational budget and subsequent rise in tuition. Studies done using students' scores on state and national tests have determined that students on average did worse on standardized tests in the years after the subprime mortgage crisis than before. Of course, this disproportionately affected low-income and minority students who had their education system's further impacted by the statewide budget cuts. The Great Recession definitively expanded the disparity in quality of education between Black or Hispanic and white students. Another consequential factor in the declining in value of student experience was the necessitated changing of residence that many students went through as a result of foreclosures and thinning economic opportunities. Whites and disproportionately more Black and Hispanic individuals were coerced and conned into misleading, high-interest mortgages even if they qualified for a higher-quality, low-interest loan, which led to high rates of foreclosure and an increase in local moves in search of profitable conditions with cheap housing especially in the South and West of the U.S. This packing up and switching in dwellings has been proven in a research study done by Katharine Bradbury, Mary A. Burke, and Robert K. Triest to have negative effects on students' performances in school. Public schools were not the only school systems that were heavily upset by the economic meltdown.²² Private schools were forced by the economic situation to raise tuition, which quickly rose to a point that many families could no longer afford to send their children to a private school. This impact was most noticeable in the most severely impacted areas in the nation, and this introduced the newfound issue of students leaving private schools for the public school systems, who found themselves dealing with increased numbers of students while they were required to let many of their teachers go. The U.S. school systems experienced severe repercussions from the subprime mortgage crisis that required almost a decade in many situations for the nation to recover from.

While the Great Recession impacted almost every facet of the economy and society of the United States, one of the most interesting impacts was on crime in the U.S. One incorrect assumption that many Americans make about the national crime rate is that higher unemployment rates lead to higher crime rates. This belief became popular in the

mid- to late 1900s as the understanding that as less inappropriate work became available the more people would turn to illegitimate work, such as crime. Another reason why a large percentage of individuals are under this belief is because a large portion of crime is enacted in low-income areas with high rates of poverty and high unemployment rates. While this argument seems simple and sound enough, it has been proven to not be accurate in the United States. In the Great Depression, as unemployment rates rose to 25 percent, crime rates in a large number of cities decreased. Then, the mid- to late 1990s was a span of rising crime rates, while the unemployment rate stayed largely constant from the mid-1900s to the early 2000s, and the late 1900s and early 2000s represented a time of declining crime rates. The next most significant rise in unemployment was a result of the subprime mortgage crisis, but in the years during and following the financial breakdown, the national crime rate substantially dropped, while unemployment rose to 10 percent. In 2009, the national robbery rate had dropped 8 percent and the auto-theft rate fell by 17 percent from last year's crime statistics. Many major U.S. cities such as New York, Boston, Chicago, and Los Angeles all experienced substantial downturns in robbery and burglary rates in the years during and soon after the Great Recession. While many experts disagree with this procedure of basing the connection between economic dissatisfaction and crime on the unemployment rate, when other economic measurements are taken into account, similar results are procured. An example of this is the labor-force participation rate, which determines the not working nor seeking work portion of the labor force, who in theory should be the most susceptible to criminal predisposition, but as an increased number of young men, which is the most probable demographic to experience criminal inclinations, left the labor force, extensive drops in crime continued to occur.

Many observations and answers as to why the unemployment rate and national crime rate run inversely have been provided throughout the years. One of the most popular is the inclination that when poverty rates are high and economic stress is running rampant, families tend to draw closer together and parents are more likely to be protective of their children. Children that may be more attracted to criminal actions are regularly looked after and monitored by their parents, who may be craving control over one facet of their lives due to the economic meltdown and insecurity or could just be experiencing protective inclinations from the uncertainty of the time period. Hundreds of separate explanations ranging from medical reasonings on rates of lead in childrens' blood to just an increase in criminals residing in prisons have been identified as possibilities, but one of the most interesting answers would be that a major cause of the drops in crime rates in recent years is due to a massive advancement in U.S. culture. While this is essentially impossible to connect and measure, an increase in nationwide self-discipline is a viable explanation for a continuous drop in criminal actions.

In summary of the Great Recession's societal impacts by region in the United States, the largest repercussions and consequences occurred in the West and the South. The West was one of the most efficiently-developing and prosperous areas of the United States, which prompted a drastic increase in real estate funding and the production of new, unnecessary homes that were built in expectation of increasing housing prices and a further influx of individuals moving to the West in search of economic opportunity. When the subprime mortgage crisis transpired, these huge areas of recent residential construction lost value at extreme rates. With falling real estate prices, high rates of foreclosure and mortgage defaults, and widespread economic failure, Americans quickly fell into debt and unemployment. Lower wages and incomes, higher unemployment rates, and reduced economic opportunities plagued the residents of the United States. The South was arguably one the most severely affected by the subprime mortgage crisis not because of the immediate results of the financial breakdown, but because of the long recovery that the South experienced to pull itself out of the hole that the Great Recession dug under its feet. The South was the most poverty-stricken and poorest region of the United States with a far less profitable economy than the other regions and generally low incomes. It has consistently grown to become one of the greatest economic issues of the U.S. through ignorance and insubstantial intervention. The South has always held the highest rates of Black individuals in the U.S., even containing over half the U.S. African American population at the time of the crisis. Black communities were the most disproportionately affected demographic of society with predatory, adjustable-rate mortgages administered to Black individuals even if they qualified for a fixed-income, high-quality mortgage loan. Residential segregation and discriminatory practices such as redlining have historically forced and are still currently forcing Black communities into low-

quality areas with high rates of poverty and horrible environmental conditions. Mortgage originators took advantage of these exploited and redlined zones to administer ARMs and other complicated mortgages such as interest-only home loans that misled the borrower into taking on a mortgage that the mortgagor could eventually not afford. African Americans were the most disproportionately affected in the crisis, and this especially occurred in the American South. Economic stress and insecurity were already so prevalent in the South that the subprime mortgage crisis plunged it into chaos as housing prices and wages fell and unemployment and poverty rates rose. The financial crisis impacted practically every aspect of society in the southern and western regions of the United States, and it took nearly a decade for the majority of the long-standing repercussions to deteriorate.

Conclusion

Two major questions have defined the years of research and theories that have been contrived in response to the subprime mortgage crisis. What were the most critical causes of this economic breakdown, and who benefitted from this crisis? The latter question has perhaps the simpler answer currently.

We honestly have little to no idea where the majority of the lost money in the 2008 financial crisis has spread to. Economists and financial crises experts have attempted to understand how such a massive sum of money can essentially disappear, and they have largely come up empty handed. Yes, we are aware of a few institutional investors and companies that made risky, instinctive decisions in the stock market of the declining U.S. economy and profited in radical, exceptional manners. A prime example of this is Warren Buffet, who heavily invested in Goldman Sachs during its downfall, and because no one else was willing to put substantial amounts of money into this seemingly failed corporation, he emerged with a fantastic deal that made him billions of dollars. But this does not deter from the fact that we have no idea where the overwhelming majority of money lost in the subprime mortgage crisis is. Speculations on the value of the entire sum of cash lost in that economic meltdown have been made, and the results are astronomical. The exact number is increasingly difficult to procure simply because of how large this economic devastation was and the extent to which speculative and off-the-book trading played in the crisis. The U.S. Treasury eventually labeled the loss in household wealth at a little over 19 trillion dollars. The actual and potential GDP had an estimated difference of about \$2.6 trillion. The real estate industry lost around \$7 trillion, while the stock market experienced a loss of \$11 trillion in shareholder wealth. Retirement accounts also took a hit of \$3.4 trillion.²³ The complete losses from this financial crisis combined for almost \$25 trillion in losses, which to put that in perspective, was a little under half of the entire world's GDP. We can't even put a price tag on many of the other casualties in the U.S., such as in human suffering, a dramatically raised unemployment rate, and the long-standing effects of this crisis.

Another question that springs to mind from this last one is how to make up for the personal losses orchestrated by the subprime mortgage crisis, such as disproportionate losses in home equity, long-standing effects that still disadvantage families today, and human suffering caused by high unemployment and foreclosure rates. How do we rectify the decimating impacts that the 2007-2009 financial crisis had on certain demographics, such as Black communities. The long-standing effects have yet to be addressed, and they may never be. The answer, even though it is quite disheartening and dismal, is that we most likely cannot ever make up for the effects that the aftermath of the subprime mortgage crisis had on certain families. The impacts were so widespread and lasting that repairing the disproportionate damage that the crisis did to specific communities and families would be near impossible. The best response that we should focus on is assuring that as disproportionate a result of an economic crisis will never occur again. Low-income, subprime borrowers should not find themselves misled and coaxed into a predatory mortgage loan that results in forcing them into foreclosure, an even lower credit score than they began with, and higher debt. Black communities should not be targeted for predatory loans simply because they have always been disadvantaged and economically exploited. We must prevent outcomes like those that were experienced in the subprime mortgage crisis from ever transpiring again.

Economists have spent years speculating what the most prominent causes of the subprime mortgage crisis were and how to address the systemic problems that were unveiled as the Great Recession fell over the United States

like a cloak of destruction. The subprime mortgage crisis was a time bomb with many separate layers that each had to coincide in their destructive financial strategies to create the economic situation the United States found itself in. The financial institutions and organizations such as investment banks and mortgage originators that governed a large portion of the tiers each attempted to take advantage of another segment of the catastrophic system, and in doing so, they decimated their future and plunged their nation and world into an economic crisis. These companies recognized how to take advantage of their economic situation, and through this exploitation, the financial institutions determined the cheapest, highest profit margin strategies they could fathom and carried them out. But they became enormously greedy, and they pursued even less expensive, more profitable dealings that would achieve their wildest financial desires, and in order to capture their dreams, they resolved to exploit everyone they could at every opportunity. Mortgage brokers ladened borrowers with high-risk, low-quality, adjustable-rate mortgages for the higher commissions that their companies would grant to those that doled out the mortgages with the highest interest rates and largest fees. Mortgage companies encouraged these high-risk, misleading subprime loans because they were aware of their ability to transfer the risk to investment and shadow banks and rake in the profits. Investment banks discovered how to gain complete control over their surroundings, such as forcing credit rating agencies to falsely evaluate their bonds so they could pass off the worst-quality mortgage-backed securities as completely riskless. Shadow banks over complicated their financial instruments until no one could understand what was really backing these securities, and this eventually led to their downfall. The blame could be passed all over the U.S. financial, mortgage, and housing markets, but the actual, most significant causes can be narrowed down to a multitude of less consequential explanations and a small number of major factors that all combined to form the worst financial crisis the United States had experienced in almost 75 years and wide-ranging impacts across the entire globe.

Four instrumental acts allowed for the subprime mortgage crisis to occur. While the financial breakdown might still have ensued had one of these actions not taken place, it would have most likely been on a far lower magnitude. The first of these was the securitization of mortgages, which occurred around 1970. This is undoubtedly the most significant of the factors that allowed the subprime mortgage crisis to develop because it would have been impossible without it. This allowed shadow banks to package mortgages into securities, and it eventually resulted in investors and firms forgetting the overarching rule that a mortgage-backed security is only as secure and profitable as the mortgages that make it up. The second of these was the repeal of the Glass-Steagall Act of 1933 by the Gramm-Leach-Bliley Act of 1999. This disposed of the regulations that protected consumers from extreme risk and permitted financial institutions to provide a wide increase of services that led to exploitation, greed, and fraud in the financial markets. The third and fourth of the factors go hand in hand. Alan Greenspan's strategy of little to no regulation on the American financial markets and extreme lowering of interest rates in response to the bursting of the dot-com bubble and 2001 terrorist attacks set the stage for the subprime mortgage crisis. Interest rates were at never before seen lows, and mortgage brokers sought to take advantage of this. The Fed's lack of financial regulation permitted investment banks to exploit their customers and plunge the economy into turmoil. Each of these elements combined to allow the financial crisis to occur and increased the magnitude of damage and exploitation that resulted.

While those three factors permitted the financial crisis to happen, these next three components were the most major causes, motivations, and explanations for the actual occurrence. Beginning with the lowest tiers of the subprime mortgage crisis, the first of these factors was the popularization and employment of predatory, subprime lending. This is defined in the provision of misleading mortgage loans with factors such as teaser rates, interest-only options, or minimum payments that actually decreased home equity and essentially assured that borrowers would not be able to pay off their mortgages. Adjustable-rate mortgages coerced mortgagors into low-rate loans, and they then experienced a radical increase in interest rates that borrowers would most likely not be able to afford. The second of the most significant causes of the subprime mortgage crisis was the greed of investment banks that sought to take advantage of their financial markets and exploit their own customers without regard for the future. These firms knowingly packaged and repackaged low-quality mortgages into securities that misled their investors and over complicated their subprime mortgage bonds until they were practically the only ones who actually understood what was backing these securities. They leveraged their positions in the financial markets at extreme degrees, and they encouraged speculative trading

and synthetic bonds that eventually brought down the U.S. economy. The last of the major explanations for the 2007-2009 financial crisis was inaccurate rating procedures in the credit rating agencies that American and global investors trusted. These agencies complied with whatever investment banks demanded their securities be rated out of fear of losing their customers, and through this, they misled millions of investors. Investment banks had complicated and shrouded their bonds so extensively that investors practically only bought securities based off of their credit ratings. These agencies also had little to no idea what they were doing. Shadow banks quickly found holes in their procedures such as thin-file and thick-file FICO scores, and they exploited the credit rating agencies through their blind spots. Investment banks had created securities so arcane and complex that credit raters had almost no comprehension of what they were rating, and they allowed for enormous masses of American investors to be misled and exploited.

But what most individuals fail to understand about this crisis is that it only occurred through a mixture of all of these factors. One cannot simply pin the entirety or even the majority of the blame on one element. All of these factors happened to occur over a brief amount of time, and they united to achieve complete financial breakdown. The subprime mortgage crisis was a horrifying economic meltdown that forced losses of trillions of dollars and had wide-ranging, global, and long-standing effects that were brought about by a combination of detrimental money-making strategies, ignorance, and financial greed.

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