Exploring the 2008 Financial Crisis: How the Roof Caved In

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The underlying cause of the 2008 financial crisis was the insatiable greed created from chasing the American Dream. The American Dream is one of the fundamental ideals of American culture: the idea that any U.S. citizen will have a chance to prosper and find success through their hard work and determination. There is a set path for following the modern American Dream. You must work hard, and after years of pouring sweat and tears into your job then you can finally afford to buy a house. This might be a sound blueprint, but problems arise when people try to skip right to the end of the American Dream, without putting in the hard work required to get there first. This is what led to the 2008 financial crisis: people tried to buy houses which they were unable to afford, and mortgage originators were more than willing to profit off of them in the process.

The chain of events that led to the Great Recession began with the dot-com bubble burst in 2000. To stimulate the economy after the bubble burst, the Federal Reserve cut interest rates in half, to the very low rate of 3%. Shortly after, the 9/11 attacks occured. In response, the interest rates were dropped once again, to only 1.5%. The theory was that if interest rates were lowered, then consumers would be encouraged to go out and shop - hence keeping the economy afloat. Coinciding with the drop in interest rates, mortgage rates also plummeted, which made owning a house very attractive. Additionally, the housing market continued to rise steadily, which gave many potential buyers the idea to buy houses as investments, rather than simply as a place to live.

The facilitators of the housing boom in the early 2000’s were the mortgage lenders. In prior years, the banks who originated the mortgages would do a lengthy background check on the borrower before approving them for their mortgage. The borrower had to meet the 3 C's: character, collateral and credit history. However, these background checks fell out of fashion, and in their place *stated income mortgages* became much more widely used. The stated income mortgages allowed the borrower to declare their income, whether it was true or not, and then the banks would give them a mortgage based upon that income. These types of mortgages were originally intended for lawyers or doctors, because they made plenty of money but didn’t have a fixed income. However, they were widely exploited in the early 2000s by people with lower incomes who claimed that they made more money than they actually did. Concerningly, the mortgage lenders did not care about this problem, because they would just turn around and sell the rights to the mortgage revenue to investment banks on Wall Street. All that the mortgage originators had to do was make sure that the borrower did not default on their mortgage in the first three months, since they were liable for the mortgages in that case. Otherwise, the mortgage defaults were Wall Street’s problem. So, the mortgage lenders devised the suite of “Alt-A” Mortgage options to bypass the problem of borrowers defaulting within the first three months. These Alt-A mortgages were widely exploited, but the original goal was to offer a mortgage that was less risky than subprime mortgages, but more risky than prime mortgages. There were a wide array of Alt-A mortgage products, but the end result was the same. They would offer a “teaser” rate for the first year where the borrower had to pay much less than they otherwise would have had to pay, with the additional expenses being added on to the latter years of the

mortgage. So, the new Alt-A mortgages were much cheaper than a normal mortgage for the first year, but much more expensive than a normal mortgage for every following year, and in the end the total cost was more than it would have been for a normal mortgage.

Surprisingly, the borrowers were perfectly happy with the Alt-A mortgage arrangement. This is because they were able to refinance their mortgage as long as the value of their house was greater than the value at which they had bought or last refinanced their house at. Refinancing was essentially taking out a larger mortgage using the additional value of the house as collateral, so the homeowner could effectively get cash for just sitting on their home. After a few years of refinancing to pay off the rising mortgage costs, the homeowner could choose to sell their house, and use the money to pay off the mortgage while keeping the remainder as profit. However, this entire strategy of continually refinancing was contingent on house prices rising, because someone would not be able to borrow against the additional value of their house if the total value of their house fell. In that case, the value of their house could even be lower than the original mortgage that they owed on it, making it a risky endeavor which could result in bankruptcy. Despite that, it was the only mechanism which allowed many homeowners to pay off their mortgages essentially for free, and was therefore it was widely used. Additionally, before the 2008 crash, the value of home prices had been increasing consistently for the previous sixty years, so there was little reason for a normal home buyer to assume that the value of their home would suddenly crash.

Once the mortgage originators loaned money to the home owners, they sold the rights to the mortgage payments off to Wall Street investment banks. These rights to the mortgage payments were grouped into large collections of hundreds or thousands of other mortgages, which were called mortgage-backed securities (MBS). Originally, the mortgage originators sold all the mortgages which they originated to either the Federal National Mortgage Association (Fannie Mae) or the Federal Home Loan Mortgage Corporation (Freddie Mac). Both Fannie Mae and Freddie Mac were federal agencies which had a very high bar for the mortgages they would buy from the mortgage originators. They were designed to give the mortgage lenders the ability to lend more money, by buying the mortgages that were issued so the mortgage lender wouldn't have to wait for the previous mortgage to be paid off before they would could lend another mortgage. Fannie Mae and Freddie Mac were selling MBSs as early as 1981, when they were made up of only the best mortgages, earning a perfect AAA credit rating from the main credit rating agencies: Moody's, Fitch, and Standard and Poor's. However, they were making more money than they reported, leading to them being removed from the business of buying mortgages. In their place came the five large Wall Street investment banks: Goldman Sachs, Merrill Lynch, Morgan Stanley, Bear Stearns, and Lehman Brothers. These investment banks did not have the same level of regulation, or any regulation really, on the quality of mortgages they were willing to buy. Realizing this, the mortgage originators began handing out mortgages on a whim, and then turning around and selling them the next day to the investment banks. Despite the quality of MBSs dropping substantially, no credit rating agency actually dropped their rating of MBSs. The credit rating agencies were supposed to look at where MBSs were originating, and determine how likely they were to be paid back. In reality, they didn't do this as well as they should have due to a bad business model, where the investment banks were the ones who paid the ratings agencies to rate the MBSs, which meant that the investment banks had substantial

power over the ratings agencies. Because of this, the credit rating agencies were effectively deceiving consumers by declaring that risky investments were actually safe.

The investment banks packaged the mortgages they received in a stunning variety of ways. First, they sold MBSs, which were just the standard bundle of mortgages from all across the nation. Specifically, they sold tranches of MBSs. Each tranche is a cross section of a larger collection of mortgages, and their benefit was that an investor could choose a higher rated trache or a lower rated trache. The tradeoff was that the higher rates tranches were paid off first so they were safer, but they didn't return much money. On the other hand, lower rated tranches were paid after the higher rated trances, so they were intrinsically riskier, but they also promised much higher returns if successful. In addition to the standard MBSs, investment banks offered collateralized debt obligations (CDOs), which were a combination of different junk bonds and other kinds of debt, essentially a form of high yield, high risk investment. Originally CDOs did not contain subprime mortgages, but by 2006 71% of CDOs were based on subprime mortgages from MBSs, making them largely dependent on the housing market as well. However, investment banks played both sides of the table, by offering bets against their own CDOs in the form of credit default swaps (CDS). These CDSs were formed from insurance against the CDOs, so if the CDOs dropped in value then the CDSs would be paid out, but if the CDOs continued to rise in value then the CDS owners would have to pay out money to the insurer while not getting any payout from their bets on CDSs.

The whole intricate structure established throughout the early 2000s came crashing down when the price of homes faltered. The homeowners were not able to refinance in the face of reduced income or some other personal financial problems. This meant they couldn't pay their mortgages, leading to MBSs and CDOs failing. The banks themselves, who got the homeowners' homes as a consolation for their bankruptcy, were not able to recover their losses since the value of the homes were lower than the value of the mortgages which were being defaulted on. Additionally, the investment banks had to put all of their customers' money to work, and many chose to invest in the super senior MBS tranches as a "safe" way to store their money. The investment banks owed more money than they had, thanks to borrowing loads of money to capitalize on the gains in the market of making MBSs and CDOs, and as a result suffered great losses. On July 10th, 2007, the credit ratings agencies decided to downgrade the rating of MBSs and CDOs, marking the writing on the wall that these investments were not as safe as people had assumed. Lehman Brothers filed for bankruptcy on September 15th, 2008, marking the start of the widespread panic which was the 2008 financial crisis. Investors pulled their money out of the stock market and frantically tried to sell their investments. This caused a total economic slowdown, and the unemployment rate rose to roughly 10%. Merrill Lynch was bought by Bank of America after incurring $150 billion of losses, and Bank of America later received a $100 billion bailout. Citigroup was also bailed out, for $150 billion. In total the U.S. government spent $700 billion in bailouts after the 2008 crash, and it still took over a year for the economy to begin recovering from the crash. In any case where people are greedy, have extra money, and are overly optimistic about the future, there is a chance that a bubble will grow such as it did in the early 2000's with the housing market.