The Overview of the 2008 Housing Bubble and Aftermath

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Abstract:

The role of speculation within the housing market fostered the mania that swept up the financial sector through the early to mid-2000's. The speculators that entered the housing market helped cause an initial increase in price, which would bring more speculators to cash in, driving the price of housing even higher. This mania became self-fulfilling. However, as with all bubbles, they eventually pop. Unfortunately for the United States, some of these speculators were not just retail investors, but large institutional investors. Thus, a financial black hole was created. This black hole threatened the entire financial system in the United States, and therefore the world. This catastrophic event was caused because these institutions believed in the fallacy of "housing prices only go up."

Introduction: Basic Theory on Bubbles

Before analyzing the cause and effect of the United States housing bubble; what makes a bubble? Kindleberger defines a bubble as:

> a sharp rise in price of an asset or a range of assets in a continuous process, with the initial rise generating expectations of further rises and attracting new buyers—generally speculators interested in profits from trading in the asset rather than its use or earning capacity. The rise is usually followed by a reversal of expectations and a sharp decline in price often resulting in financial crisis (Kindleberger 1987, p. 281).

For a bubble to form, there is a rise in the general price of the asset that attracts speculators. As increasing number of speculators join the market, the market price diverges from the intrinsic value. This divergence results from speculators only trying to increase returns and profits, while ignoring the intrinsic value of the asset and the risks associated with the asset. This divergence of the market price from the intrinsic value is followed by the realization that the market price *is* overvalued, and the subsequent crash and panic corrects the market's error.

The speculators joined in the housing market after increased volatility within the stock market during and following the 2001 Recession. Even before the speculators arrived to the housing market, the governmental policies had already created a credit expansion that attempted to increase the homeownership share.[1] The expansionary policy led to increasing housing prices, that appealed to the speculators. As more speculators entered the market from 2001 to 2005, complexity within the mortgage lending industry increased significantly. With the increased complexity, it masked the underlying risk investment banks and investors were taking on. The result was significantly leveraged assets, causing the initial large returns to become massive losses. The aftermath was a market correction where the housing market price again equaled intrinsic value.

[1] Homeownership share is the share of citizens that own a home in the country. This was a major focus of government policy throughout the bubble.

Section I: The Credit Expansion and the Foundation for the Mania

The legislation, governmental agencies, and Federal Reserve played a role in increasing the amount of credit within the system; especially within the housing sector. Many policies allowed lending to the individuals under the median income level for housing, ignoring the wage stagnation and increasing income inequality (Piketty and Saez 2003; Piketty 2014). These policies resulted in a larger share of the United States citizens demanding homes. This increased demand was coupled with housing supply limitations from zoning laws (Glaeser 2002). Thus, the combination of increased demand and decreased supply resulted in the housing price increasing to reach market equilibrium.

Both presidents during the time, Bill Clinton and George Bush, tried to pursue ways to encourage homeownership, often to lower income and lower credit-worthiness individuals. Though this sounds politically and socially optimal, it is the initial cause of the ill-advised credit expansion. The increased governmental pressure to increase lending to the subprime borrowers is an inherently risky practice. With stagnating wages and generally poor financial literacy (Lusardi 2014), the expansionary role of the government increased the likelihood that these families would fall into debt and result in defaults.

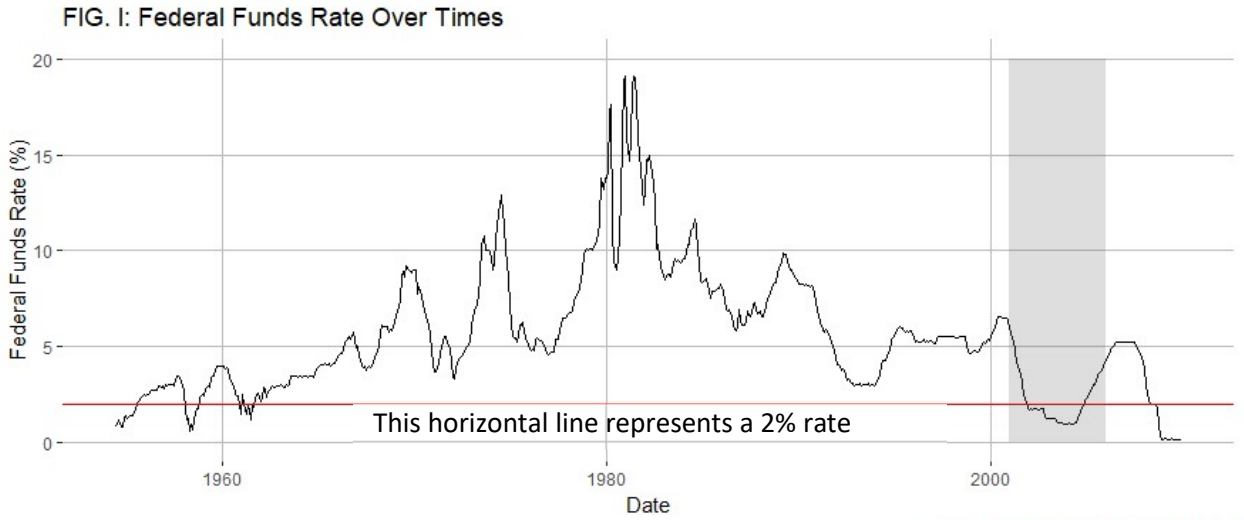
Some legislation passed was designed to benefit the homeowners such as the tax deductible of selling a house, the Community Reinvestment Act, and the changes in the Department of Housing and Urban Development's (HUD) policy. In 1997, there was a tax deductible created to allow the first $250,000 ($500,000 if jointly-filed) of a housing sale to be free from the capital gains tax (Holt 2009). In 1995, the Community Reinvestment Act was modified to try and increase lending and credit to areas that needed it (Holt, 2009; Federal Reserve Bank of Minneapolis). Partially, this modification was part of Bill Clinton's attempt to remove the regulatory overhead and "red-tape." This incentivized and pressured banks into lending to individuals and areas that needed credit, even if there was inherent risk (Argarwal 2012).

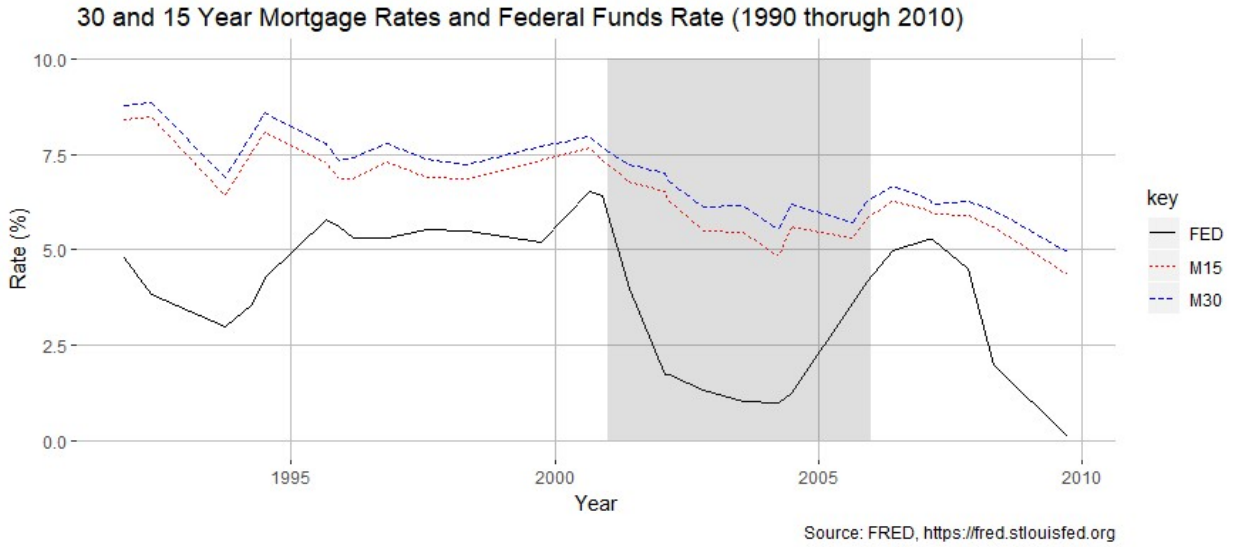
Following the changes to the Community Reinvestment Act, the HUD tried to implement changes to Fannie Mae and Freddie Mac to increase lending to the working class. Shwartz

(2009) finds that throughout the 1990's, under Bill Clinton's HUD, there was a distinct push to increase lending to individuals under the median income in their area. Additionally, Freddie Mac and Fannie Mae were given a minimum target percentage of total lending to these individuals (individuals below the local median wage) of 42% in 1996, 50% in 2000, and 52% in 2005. These targets caused Freddie Mac and Fannie Mae to buy subprime mortgages in an attempt to satisfy the goals given to them; meaning the working class and riskiest individuals underwent a massive credit expansion.

These various legislation and rules imposed by HUD from 1990's onward caused the United States to gain more money and credit for housing than a laissez-faire market would allow. The pressure by the government to increase the share of homeowners within the country is reasonable, possibly even morally justified; but the economic consequences are the borrowers are of lower income levels and lower credit-worthiness ratings; increasing the risk within the mortgage sector.

The credit expansion was not only through fiscal policy and executive agency actions, but the Federal Reserve tried to encourage spending by offering low federal funds rate (Figure I). From 2001 to 2005, the Federal Funds Rate dropped from roughly 6% to below 2% for the first time since the 1960's. Additionally, the rate had been declining since 1980 when the rates were near 20%, meaning that even the 6% was relatively low. The low federal funds rate followed the expansionary policies of the 1990's and continued throughout the bubble.





The legend is: **FED**- Federal Funds Rate, **M15**-Average 15-year mortgage interest rate, **M30**-Average 30-year mortgage interest rate

All Datasets from the Federal Reserve Bank of St. Louis:

Freddie Mac, 30-Year Fixed Rate Mortgage Average in the United States [MORTGAGE30US], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MORTGAGE30US, December 6, 2018.

Freddie Mac, 15-Year Fixed Rate Mortgage Average in the United States [MORTGAGE15US], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/MORTGAGE15US, December 6, 2018.

Board of Governors of the Federal Reserve System (US), Effective Federal Funds Rate [FEDFUNDS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FEDFUNDS, December 6, 2018.

The Federal Funds Rate being lowered was initially used to encourage banks and investors to increase the liquidity in the economic system after the 2001 Recession from the Dot-com bubble and the terrorist attacks. Ideally, the lowered federal funds rate would help stabilize the economy by increasing investment which is the most volatile aspect of the

economy. By lowering the interest rate of borrowing for banks, this has a ripple effect that will cause other lending interest rates to decrease. For example, the average 15-year and 30-year average mortgage interest rates both saw declines along with the federal funds rate (Figure I). With more investment through loans with low interest rates, the economy undergoes a credit expansion as investors look to increase debt to finance investment.

Now banks could borrow at 2% or lower between 2002 and 2005, which were record lows for the previous 30 years. Therefore, banks were lending increasing amounts of credit to investors, believing the rates would eventually rise and would not be able to profit from the low federal funds rate forever.[2] Unfortunately, these lowered rates just encouraged too much lending in the mortgage sector with seemingly unlimited credit. The monetary and fiscal policies were designed to help stimulate the economy and encouraged the middle and lower classes to achieve homeownership. This resulted in a massive credit expansion that helped the housing market see increased prices before the investment banks got heavily involved in the market.

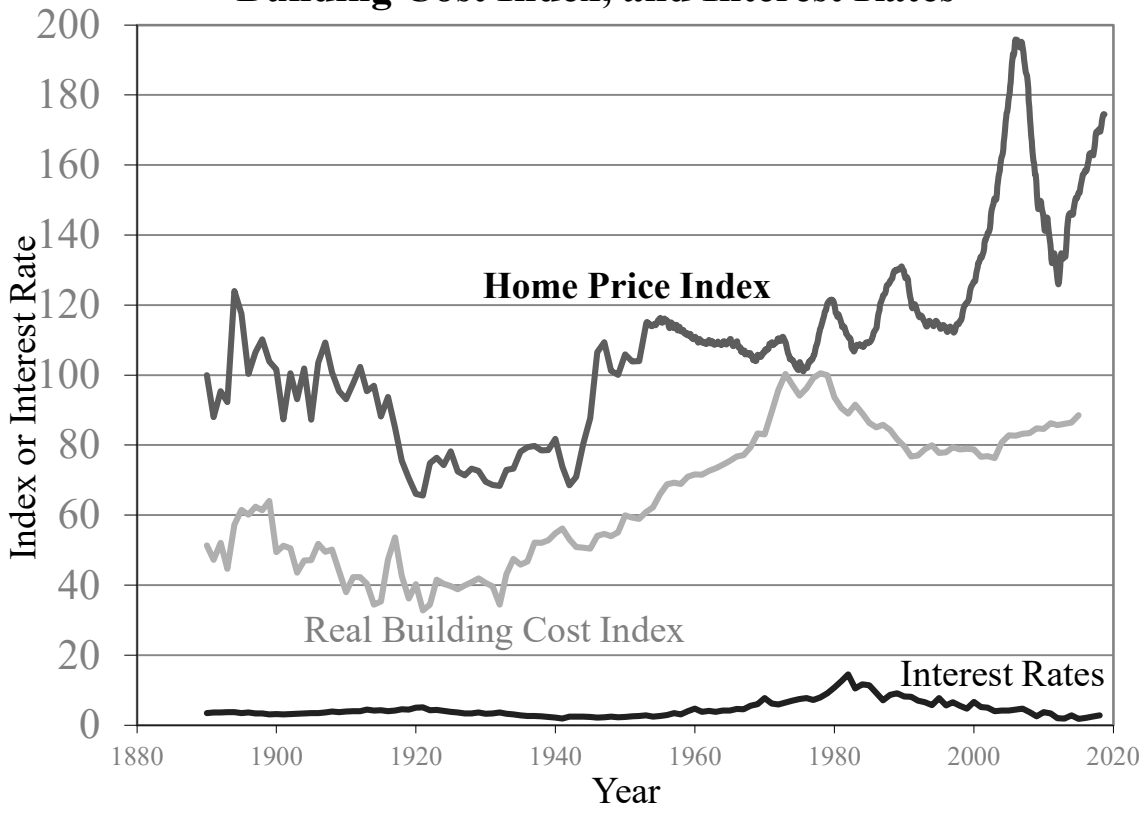
[2] Shockingly, they were wrong. Sarcasm aside, the Federal Reserve would make the rate practically 0% after the recession to encourage lending and increasing the money supply and liquidity within the economy, again.

Section II: Evidence of the Mania's Beginning

By analyzing the Case-Shiller Index from Robert Shiller's dataset dating back to 1890, there is evidence that housing does not consistently increase. This highlights the primary fallacy at the heart of the mania: that housing prices will keep rising. Although housing is more stable than the stock market, it is not a completely risk-free investment.[3] The index looks at 10 or 20 metropolitan areas and compares the resale price to the initial sale price and standardizes the result. This helps form a generic index with a base of 100, that can capture general trends within the market. In Shiller's graph (Figure II), it depicts the housing index, real building cost index, and the long interest rate average each year. The graph clearly has a peak during the housing bubble timeframe with a rapid increase in the index's value from late 1990's through 2006/2007. One of the most noticeable features is there seems to be periods of high volatility within the housing market over the past century. Additionally, the index highlights why the fallacy that housing prices only increase was wrong by showing multiple timeframes of housing prices decreasing throughout the 1900's. Unfortunately, the mob mentality meant that this fallacy was a driving force behind the mania that occurred; regardless of the objective proof against said fallacy.

[3] Nothing is really a risk-free investment. Some assets can be considered borderline like treasury bonds.

FIG. II: Robert Shiller's Graph of Housing Index, Building Cost Index, and Interest Rates

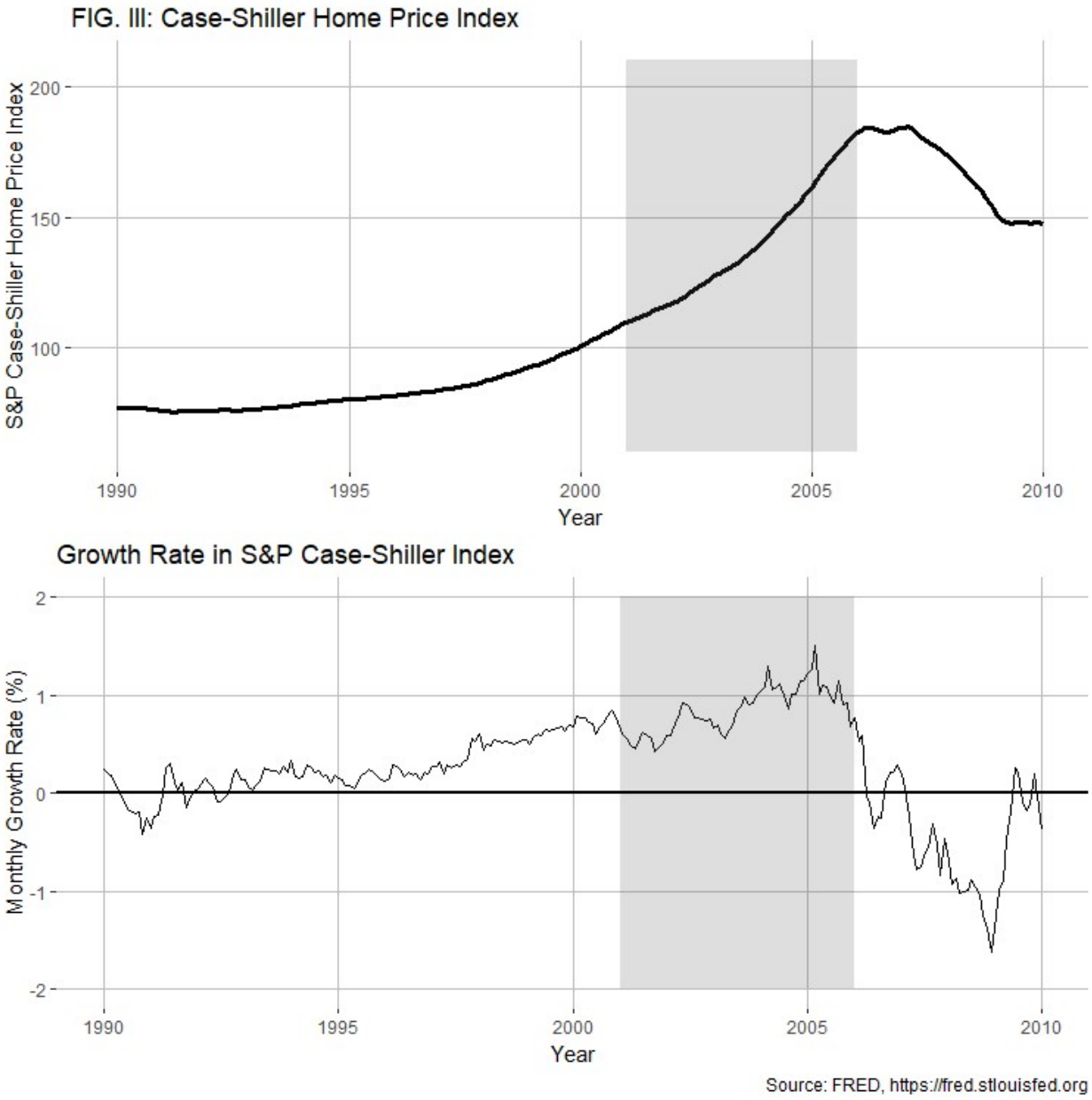


Data from Robert Shiller's personal website

Shiller, Robert. "US Home Prices 1890-Present." 2018. Robert Shiller's Website. URL: http://www.econ.yale.edu/~shiller/data.htm.

A narrower timeframe shows graphs of the S&P Case-Shiller Index and the monthly percent change in the S&P Case-Shiller Index, with the highlighted region being of primary interest between 2001 and 2006 (Figure III). The index shows a general upward trend from 1995 through 2005. The 1990's saw legislation and policy changes within HUD to increase the prospective homebuyer base by reaching out to the working class. These increases also correlate with the Dot-com bubble of the late 1990's. Overall, the index implies growing demand and increasing prices to equalize this demand.

The graph of the monthly percent change in the index, shows a significant rise in the prices between 2002 through 2005/2006. The index was increasing between 0.75% and 1.5% a *month* between these years, which is stunning growth when fundamentals, such as income and building costs did not substantially change (Piketty, 2014; Figure II, Real Business Cost Index).



Data from the Federal Reserve Bank of St. Louis:

S&P Dow Jones Indices LLC, S&P/Case-Shiller U.S. National Home Price Index [CSUSHPISA], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/CSUSHPISA, December 6, 2018.

Put simply, the rapidly increasing Case-Shiller Index shows the market was exhibiting mania-like patterns in the general trend of increasing housing prices.

Additionally, the percent change of the index shows the increasing nature of housing prices started even before the Dot-com bubble burst. This bubble likely inflated prospective homebuyers' perspectives on the future economy, increasing the demand for housing and

causing the market price to increase. Once the Dot-com bubble burst increasing stock market volatility, many investors looked to real estate as an alternative investment that held lower risk.

This act of maneuvering capital away from stocks is common when there is increased volatility. Typically, bonds are the asset investors look to, as it is low risk and low return. However, the housing market looked promising as the prices kept increasing steadily, while the fallacy that the housing market was low risk investment spurred people to invest in housing rather than traditional low risk, low return bonds. Many thought they were investing in an asset that was low risk with relatively high returns, with the only real risk being lower returns. No one considered that the housing market was actually high risk.

Section III: The Mania Escalates with Investment Firms Entering the Market

If only the average investor entered the housing market, the crisis would not have occurred, or at least not to the same extent. These investors would simply not be able to invest enough money and credit to cause such a massive financial fallout when the market changed from bull to bear. Hence, the crisis was caused by other speculators: the investment banks. The investment banks brought enough financial might to cause potential issues when the bubble burst. Investment banks had already been buying mortgages to form mortgage-backed securities that are then sold off to investors. These mortgage-backed securities became extremely complex and the complexity resulted in hiding of the underlying risk.

Traditional banking would see banks offer a loan with a set interest rate they would receive from the borrower, the practice of originate-to-hold. The crucial aspect is that banks created loans to hold themselves, meaning for the following years until the loan was fully paid, there was risk that these loans would default. This interest would have to cover the inflation rate and money lost from defaults. This is achieved by finding the rate that maximizes the profits while minimizing default rates. No bank can assume all borrowers will pay, so they must hedge by giving a higher interest rate. This meant banks had to worry about long-term risk when creating the loans. Obviously, if the banks could minimize the default rates, this would increase profits, encouraging strict lending requirements like high credit rating and proof of acceptable income levels.

There was now a shift towards originate-and-sell type of mortgage lending. This practice is where banks give a loan, then quickly sell to an investor (often an investment bank) to pocket a small return. Though the returns are smaller, this removes the long-term risk of holding a loan and seeing it default. This means the mortgages and loans are no longer on the bank's books. The investment banks would buy thousands of mortgages and then package them into securities to sell to investors; the MBS or mortgage-backed securities. These MBSs could then be packaged together again to form CDOs or collateralized debt obligations (Richards 2013).

This form of securitization of mortgages is brilliant because it removes long-term risk from the banks, so banks are incentivized to offer more mortgages and potentially lower interest rates as they have no risk anymore. The issue: the risk cannot literally disappear, it just shifts to the "next guy," which happens to be the investment bank and investors. Conveniently, the securitization attempts to diversify the risk by pooling the securities together. The idea of diversification is smart, but unfortunately there is underlying macroeconomic risk among the mortgage-backed securities (Benmelech and Dlugosz 2009).

Although there is correlation at a macroeconomic level, the credit rating agencies, Moody's and Standard & Poor, had models that failed to factor in this correlation. The missing correlation would result in the models wrongly assuming default rates followed normally distributed white noise (Benmelech and Dlugosz 2009). With this statistical modelling error, the rating agencies were giving inflated ratings on securities. The credit rating agencies in 2007 and 2008 revised ratings after it became clear the default rates were correlated through general macroeconomic trends. Of the securities that were given revised ratings, about 33% were the highest possible rating, indicating the agencies were very wrong (Benmelech and Dlugosz 2009).

Richards (2013) directs the blame at the government for making the credit rating agencies take payment from the firms whose securities they have to rate. This conflict of interest is problematic. If a firm is selling a good, then firm tries to offer a superior good; so, the raters would offer high ratings, which would attract the investors. The conflict of interest is a major aspect of why credit rating agencies had such wrong ratings, but also the complexity within the financial system meant it was not obvious how much risk was present. For example, the terms like CDO, MBS, RMB (residential mortgage-backed securities), ABS (asset-backed securities), or credit-default swaps (insurance that was really a derivative), were used to confuse both outside observers and the credit rating agencies. The fallacy that housing prices would keep rising also prevented the massive risk from being discovered as no one believed these mortgages would all go bad. With increased complexity and conflict of interest, credit rating agencies had no incentives to try and fix their models as these models were selling ratings.

With the inflated ratings implying low risk, investment banks started to actively get risky mortgages. These risky mortgages had higher interest rates, and therefore had a higher payoff rate than the less risky mortgages. If the investment banks maintained an average FICO credit score of 615 within the package of mortgages, then they would be given a good, low risk rating (Lewis 100). Meanwhile, these securities would then attract investors because they were supposedly high return due to the higher interest rates and low risk based on the credit rating agencies faulty rating.

This label of high return for low risk is an impossibility in economics. If an asset is labeled as high-return, then there must be high risk as well, or everyone would be purchasing this asset. In this case, investment banks all started purchasing more of these assets. Either the assets' returns would falter, or the risk would become apparent; but since it was related to the housing market prices, no one believed there would be risk. The fallacy of housing prices again caused investment firms to view the *only* risk as these securities ultimately showing low returns in the long-run, not immense losses a few years later from a market correction of a bubble and mania.

These security pools required large number of mortgages, thousands for most securities; with some securities being a collection of other mortgage-backed securities, meaning tens of thousands for some securities. The demand for mortgages meant banks needed to increase the supply to match demand. This was possible through the deregulation from the 1990's through the early 2000's and the expansionary policy to increase the homeownership share. With pressure to lend to the lower and middle class, banks now had the opportunity to both meet requirements from the government and make profits through the "low risk" investments in mortgage-backed securities. Fannie Mae and Freddie Mac held significant share of loans in the system, about 25% of all loans, to the subprime sector of American households, with the Community Reinvestment Act and HUD programs holding an additional 4% (Richards 2013).

This caused a rise in predatory lending practices, where the mortgages were not fixed-interest rates, but adjustable. These adjustable-rate mortgages (ARMs), were the start of a

practice of exploiting the financially illiterate masses to satisfy the desire for risky mortgages that would offer high interest rates. The government pushed the financial sector to lend to subprime borrowers, and now the financial system was too reliant on risky individuals to keep paying. The belief was that everything will be fine, since housing prices will keep rising, poor families can simply refinance or sell their home for a profit. The fallacy that home prices always increase was the heart of why the investment banks continued dealing within the subprime lending sector, why the credit rating agencies were willing to give high ratings for pools of risky individuals, and why the government encouraged subprime lending.

Section IV: Leveraging Intensifies

Before discussing the impacts and occurrences of leveraging by investment banks (primarily), what is leveraging? Leveraging is a risky practice that involves an investor borrowing money to invest in an asset. For example, an individual with $100 borrows $900 (assuming no interest, for simplicity) to reach a total of $1,000 to invest in. This $1,000 is then invested in asset A which increases by 5% before he cashes out with 1,050. The individual repays the $900 loan, resulting in a $50 return. This $50 return means the individual gained 50% in income. This practice can sound beneficial, but only when the asset *increases* in value. If the asset were to *lose* 5% in value, then the returns would be $-50 because $950 of the assets less the $900 for the loan results in a significant loss of 50%. If the asset's value decreases by 11% (to $890), the individual will go bust; unable to repay the loan of $900 with only $890 earned from their investments.

Any sensible investor would be sure to only use leveraging when the risk seems close to 0; and really be sure to never default if all goes poorly. Unfortunately, the market viewed the risk as near-zero if not zero, utilizing the mischaracterized ratings at face value to justify the leveraging. Additionally, the governmental policies helped foster a sense of moral hazard where even if the investment bank were to go bust through leveraging, the investors would keep their money and the government would bail their firms out. This highlights moral hazard where banks did not feel the need to be risk-adverse or even loss-adverse, and even approached risky policies like leveraging because the government would give loans or subsidies to offset loses.

Leveraging does not necessarily mean bankruptcy, but the investment firms in the housing bubble started to use extreme amount of leveraging to try and maximize profits. The Federal Crisis Inquiry Commission (FCIC, 2011) found investment banks were reckless toward amount of risk they took on. The FCIC found that the big investment banks like Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley had leverage ratios around 40:1 (United States Financial Crisis 2011). This means that for every $40 in assets these firms had only about $1 in actual equity, with the remaining $39 being borrowed. This meant if the asset's value declined by 3%, not much by any standard, then they would go bankrupt. For

example, Bear Stearns had 11.8 billion in equity and 383.6 billion in liabilities, meaning 4% decline in assets, would cause bankruptcy (United 2011).

The complexity was a crucial issue as firms looked to mask the amount of leverage from the public. The investment firms successfully hid the leverage ratios from the public through capital and balance sheet maneuvering. They understood that people would immediately be skeptical if they managed their assets with credit and only a few feet away from financial collapse. The largest holders of leveraged assets? Fannie Mae and Freddie Mac who had leverage ratios of about 75:1. These are the federally-backed institutions that the government pressured into making increasingly risky loans over the previous 10 years. The household debt from mortgages rose 63% from 2001 to 2007 highlighting the credit expansion aimed at the housing sector (United 2011). The primary cause for the excessive leveraging was the firms saw short-term profits increase with increased leverage, but ultimately failed to understand that it is not sustainable in the long-run.

This amount of leverage should never have been allowed to go unseen. The investment banks played the role of the "shadow banking sector" that was removed from the Federal Reserve and FDIC purview and therefore had no regulatory body and no insurance on deposits. Paul Krugman describes this "shadow banking" practice in *Return to Depression Economics and the Crisis of 2008* as an institution that appears like a bank but has higher returns. These institutions tend to have higher returns because they can deal in riskier assets because they are not under the insurance and regulation of the Federal Reserve. This mirrored the Panic of 1907 when various bank-like institutions were making risky loans while trying to act like a normal, low-risk bank ("Banking in the Shadows").

The increased leverage ratios outline the increasing moral hazard where investment banks believed that if the worst happened, the government would bail them out. The biggest firms with the highest leverage ratios were the federally-backed institutions: Freddie Mac and Fannie Mae; allowing other large investment firms to enter the market under the pretense that it was a stable, low risk investment. The returns were lucrative in the beginning, again masking the risk of potential loses. The FCIC also conclude that there was not enough accountability

within these firms as no one truly understood the entire business model they were implementing. The complexity had reached a point where the banks themselves had trouble trying to recognize the risks involved.

Section V: The Concluding Pop

As the Citigroup Chairman Chuck Prince put it, “as long as the music is playing, you’ve got to get up and dance” (Pearlstein 2013). Unfortunately, the music did indeed stop. The bubble did pop. The crisis hit when the market realized that housing was no longer high return and low risk. The bubble had started to lose some air. As people started realizing the market was overvalued, and that speculators had diverged the market price from the intrinsic value by artificially inflating demand though lending to risky individuals; the mortgage-backed securities started to lose their value. Again, the leveraging made the decreases in prices incredibly dangerous for the investment banks as they started to face huge loses. The financial sector now was in full panic mode. The result was a massive recession named after the Great Depression, massive bailout to the investment banks that over-speculated with leverage, and a stimulus plan aimed at helping ease the economic pain for the rest of the country.

Following the Great Recession, there was a piece of legislation passed attempting to limit the financial sector: Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) in 2010. Dodd-Frank was aimed to regulate the areas of the financial sector that were not regulated and try to impose rules and agencies to prevent a repeat crisis. The Financial Stability Oversight Council was created to work with the Federal Reserve to isolate banks posing systemic risk and to devise regulation and procedures to reduce this risk. The largest reform requires the Council to perform audits under the assumption the economy performs poorly (US, Congress, “Reporting”). The Consumer Financial Protection Bureau was created to prevent fraudulent and predatory practices that harmed consumers such as limiting the adjustable-rate mortgages (“Consumer Financial”). A market was formed for over-the-counter derivatives and other hidden markets that hid the systemic risk during the bubble (Huntington).

Some policies passed to target the housing market in particular were the creation of the nationally recognized statistical rating organizations, Whistleblower Act, and the Volcker Rule. The nationally recognized statistical rating organizations are credit rating agencies that get labeled as accurate and trustworthy. The requirements to get the trustworthy status are to provide proof that you consistently give accurate ratings and to provide evidence that your

models are accurately capturing risk (US, Congress, “Nationally”). The Whistleblower provision is straight-forward: a monetary incentive to employees within fraudulent businesses to step forward. This act is a broad-covering policy but relies too much on employees discovering fraud and predatory practices instead of an actual regulatory body (US, Congress, “Implementing”). The Volcker Rule aims to bring back some Glass-Steagall banking regulations in the form of separating hedge funds and equity firms from commercial banking. This is probably the harshest ruling that really aims to curb speculation by the banking sector (US, Congress, “Reporting”).

Ultimately, the financial crisis was caused predominantly by the housing market which experienced a mania from the 1990’s through 2005. The mania was allowed to happen following the credit expansion pursued by the United States government which helped start the initial increase in housing market prices. These policies were aimed to increase lending to the subprime borrower. The credit often went towards housing, offering lower-class and middle-class citizens mortgages, and they encouraged lending to areas that needed credit regardless of risk. This shows the government was *pushing* additional risk onto the banks because of the mania’s biggest fallacy: housing prices will never fall.

Even though there was additional risk within the subprime mortgage sector, investment banks utilized financial complexity to mask the underlying risk. The complexity and conflict of interest caused the credit ratings on the securities to be inflated, yet investors held as objectively accurate. The only way the complexity could really become so great was the underlying fallacy that housing prices would continue to rise. With the risk hidden, many firms started using excessive amounts of leverage. This excessive leverage ultimately was the downfall of the system as the leverage ratios were so high, that many institutions could not possibly afford a decrease in asset value of only 5%. This leveraging utilized within the mortgaged-backed security market caused the financial crisis after the housing prices stopped increasing, resulting in increased default rates across the country. These default rates would cause the securities to plummet in value as everyone pulled their investment out, causing a panic.

The aftermath produced a financial crisis that spurred the government to try and pass regulation from preventing a reoccurring crisis. The Dodd-Frank Act was the primary legislation passed, and the limitations it imposes on the financial sector are widespread.[4] The goal is to decrease the role of "shadow banking" and create agencies to help protect the average citizen from the predatory lending that occurred during the housing bubble to fund the bubble. Whether the legislation is enough to prevent another housing and financial crisis is unknown, but the law does have potential to offer information about any future crises. Like the response by the French to build a wall to protect themselves from Germany, Dodd-Frank attempts to reign in the greed of the financial sector and limit the damage they can do to the economy. Germany prepared for a *different* war, where the Maginot Line was meaningless; much like how financial institutions will create some complex financial security that will make this policy obsolete.

[4] Ironically, many of the financial reforms have been repealed or stripped of the harshest regulations. So, we will never really know what these regulations could prevent.

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