Spring 5-1-2013

Financial Regulation and the Crisis of 2008

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Abstract

The effects of the global financial crisis that began in the United States during the year 2008 are still being felt today, and the full long term impact of the crisis remains unknown. However, causes of the crisis and strategies for reform of the global financial regulatory system have already been analyzed in depth by various scholars and institutions. By studying the existing literature this paper examines the regulatory and economic environment present in the United States at the onset of the crisis, the regulatory response of the United States government presented within the Dodd-Frank Act, and discusses possibilities for the direction of future reform with the intent of promoting stability and creating effective regulatory schemes around the world.

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Introduction

The past decade has been filled with talk of recession, economic hardship, market downturns, and a generally gloomy outlook on the state of personal and institutional finances around the world. This financial negativity crystalized in the year 2008 with the collapse of several large financial institutions in the United States. With this event, the state of the American economy and those of other nations around the world changed dramatically for the worse. Financial assets based on the value of housing that had become popular during a boom in prices in the United States suddenly lost much of their value, and the losses were so widespread worldwide that they made almost all investments seem uncertain. This latest financial crisis, the Crisis of 2008, was a crisis of lost value and investor confidence. This lack of confidence caused the global economy to stall and cease functioning efficiently. Since the current crisis began, it has ushered in an era of hard-to-find credit, widespread home foreclosures, and sluggish economic growth.

The Financial Crisis of 2008 has been widely regarded as the worst since the Great Depression. A crisis of this magnitude did not appear out of thin air; it was the result of years of financial mismanagement. While the onset of the financial crisis was largely unforeseen, its causes have not gone unnoticed. During the latter half of the 20th century and the early years of the 21st, housing prices in the United States rose consistently nearly every year (Hardaway). This trend reached its extreme between the years 2002 and 2005 when housing prices were increasing so rapidly that in some areas prices appreciated by “20% per year in some years” (Miller). This created an asset pricing bubble, referred to as the United States Housing Bubble, in which the value of the asset in question, in this case housing, was highly inflated. By 2007, homes could not sell at their previous market values, and it was clear that the United States Housing Bubble had burst with prices rapidly declining across the country. The devaluation of this asset that had become so central to the United States economy over the previous decades triggered the Crisis of 2008, which has also been named the “Great Recession” and the “Global

Financial Crisis”. The crisis began in the United States with American financial institutions, and the unique circumstance of the American economy as the largest in the world allowed its problems to infect the entire globe. The root causes, their explanations, and the best analysis of what could have been done differently can be seen by studying the legal and economic environment at the time of the crisis in its home country, the United States.

This paper will examine the financial crisis and the legal and economic environment in the United States which precipitated it in order to provide suggestions for the direction of regulatory reform with the intention of preventing a similar crisis from having such a devastating impact in the future. It will provide an overview of the current crisis and its causes, an examination of how the United States’ legal and economic environment became what it was at the time of the crisis, an evaluation of arguments on both sides of the debate about future levels of regulation, and a look at some possible regulatory solutions.

Setting the Stage for the Crisis: The United States Housing Bubble

The financial crisis grew rapidly from the collapse of the housing bubble in the United States to one of unmanageable proportions on a global scale. At its most basic, the crisis was the result of the collapse of the globally connected asset backed financing market based on American real estate prices. Unsustainably high levels of investment were made in American housing under the assumption that the yearly trend of housing prices to increase without exception would never end. Many people subscribed to this idea because of the fact that “from 1940 to 2000, there was not a single ten-year period in which the average price of a house in the U.S. did not rise (even factoring in inflation)” (Hardaway). In light of this data, expecting housing prices to continue to rise made sense, and housing appeared to be an investment with virtually guaranteed returns. This assumption proved to be false, and the abrupt end of the trend in the early 2000’s with the burst of “the greatest asset bubble in the economic history of mankind" (Hardaway) triggered the lack of investor confidence around the world that was the problem which prolonged the process economic recovery and retarded growth. So, to understand what caused the financial crisis, one must first understand what caused its trigger: the inflation and subsequent burst of the United States Housing Bubble.

Causes

The Housing Bubble was driven by the desire of individual and institutional investors to create value and to make money with their investments. For individual investors this often meant entering into mortgage contracts that could only be paid if the value of the property in question continued to rise, and for institutional investors it meant buying and selling securities derived from these contracts. In light of years of data showing that investment in housing was a good bet, it was where many people reasonably decided to place their money. So, the question of how this bubble was created cannot be best answered by looking at the participants who inflated it and acted reasonably, but requires inquiry into the factors that allowed fundamentally bad investments in a highly inflated market to seem like good ones. A long series of government policies and regulations stretching as far back as 1913 created an environment that strongly favored investment in housing over all other investments for Americans through incentives to both borrowers and lenders.

In 1913, when few Americans had home mortgages of their own, Congress passed the Revenue Act of 1913 which among other things, set up the income tax. The act included tax deductions for interest, intending deductions to be made on interest related to operating a business. But, the deduction also indirectly allowed for interest on home mortgages to be counted. This is a very commonly claimed deduction right up to the present day, and by first allowing it back in 1913 Congress "took the first small step toward creating a housing bubble by pumping taxpayer money into the purchase of private homes" (Hardaway). This was not their intent, but by allowing interest paid on home mortgages to be deducted from an individual's tax bill the U.S. government made real estate financed by a mortgage a more attractive investment. Part of the cost of the investment would from then on be paid for by the government in the form of lower taxes on the investor, and this indirect subsidy proved to be a strong incentive to invest.

The next laws passed by the government that contributed to the housing bubble were written with the intention of promoting home ownership among Americans. The wealthiest Americans did not need help in funding the purchase of a home, but middle and working class Americans did, so in 1932 under President Hoover and then in 1933 under President Roosevelt Congress passed two laws to this end. The 1932 Federal Home Loan Bank Act was passed with the purpose of "providing liquidity to mortgage lenders, creating a secondary market [for mortgages], and 'promoting home ownership'" (Hardaway). The 1933 Home Owners Loan Act "purchased loans in default and refinanced the loans with more generous terms" (Hardaway), providing an obvious service to people striving to own their own homes by giving them a second chance upon default of their original loans.

To further encourage home ownership, the government next needed to make issuing mortgages more attractive to lenders now that many Americans were applying for loans and embracing the idea. In 1934 the National Housing Act was passed to create the Federal Housing Administration, extend government mortgage insurance to borrowers unable to make a 20% down payment, and offer loans that could be amortized over 20 years; far more attractive than the traditional nine to eleven year terms at the time (Hardaway). A government safety net for defaulting borrowers and mortgages that borrowers would be more likely to be able to pay back further increased the rate of borrowing and lending. To create a secondary market and lay the groundwork for future mortgage securitization, in 1938 Congress created the Federal National Mortgage Association, now commonly known by its nickname "Fannie Mae". Fannie Mae maintained a market where mortgage issuers could repack and sell their mortgages in order to get the funds to issue more mortgages still, and continued to do this for many years after its inception. The existence of a government backed and liquid secondary mortgage market strongly encouraged lending by showing lenders that the government supported their loans, would sometimes ensure them if they defaulted, and would assist in reselling them.

After decades of promoting the expansion of mortgage markets the United States government stepped in again to make secondary mortgage markets more profitable. Further regulations in the 1990's under President Clinton greatly increased rates of mortgage securitization, the process of repackaging and separating mortgages and their cash flows from their originators. Doing this allowed investors to profit from the ever expanding mortgage market by buying financial instruments derived from current and future mortgage payments. Repackaging and selling mortgages allowed mortgage issuers to free up the funds to issue more mortgages still. As Professor Robert Hardaway of the University of Denver College of Law observed:

> Although the institution of securitization is now associated most closely with regulations promulgated in the mid-1990's under the Clinton Administration, which 'opened the floodgates' of that process and worked with Bear Stearns to expand it broadly into the private investment sphere, the most important early steps in the process were undertaken by Fannnie Mae and her little brother Freddie Mac. (Hardaway)

The Clinton-Era regulations represented a large leap in the pervasiveness of mortgage backed securities in the American economy. The regulations did this by moving mortgage backed securities from primarily within Fannie Mae and its other government sponsored partner in expanding the secondary mortgage market, the Federal Home Loan Mortgage Corporation, or Freddie Mac, to private firms where they were exposed to and invested in by the private financial sector. The process of mortgage securitization was started by early 20th century regulations aimed at providing more Americans with their own homes, and accelerated in the late 20th century with a more sophisticated approach at the same goal. It pushed housing prices ever higher because of the great secondary demand for these mortgages presented in the form of mortgage backed securities. Seeing demand for these securities and profits to be made, lenders continued to lend and the money flowed smoothly until unprecedented amounts of borrowers began defaulting in 2006 and 2007.

As mentioned earlier, most investors involved in the housing market expected and depended on constant growth in the prices of homes perpetually. If everyone with a mortgage had continued to make their payments on time and lenders and investors had continued to profit from the issuing of mortgages and mortgage backed securities the trend would have continued, and the financial crisis would have been delayed even further than the decades that it had been brewing prior to 2008. However, as history shows, this did not happen. In 2006 and 2007 people defaulted on their home mortgages at unprecedented rates. With only a few people defaulting, home prices could have continued to rise, and banks could have sold foreclosed properties at a profit to cover their losses. But, when an extreme number of people started defaulting, the banks could not sell the foreclosed homes, and could not recover money lost on bad loans. This slowdown in buying and selling caused home prices to fall even further due to a lack of demand. Many borrowers found themselves in a situation where they were "underwater" on their mortgages, meaning that they owed more than the home was now worth. It became reasonable for these borrowers to stop making their payments and to allow the bank to foreclose since they would be overpaying for their homes at the current value if they continued to make the agreed upon payments. The cascade of defaults and subsequent drop in value caused the lighting fast burst of the housing bubble, and everyone who had assumed that there would be constant growth was now faced with an opposite and unexpected reality. It is clear that the burst of the bubble was caused by a large increase in instances of foreclosure due to mortgage default, but what caused so many people to default at the same time?

The answer can again be found by examining the incentives stemming from government regulation and their effects on the mortgage markets. In 1977 the Community Reinvestment Act was passed for the purpose of eliminating discrimination in mortgage lending and helping low and moderate income communities get home mortgages since banks were consistently denying borrowers from these areas. This act was passed with good intentions: to further expand home ownership to some of the last groups of Americans that were having difficulty achieving that dream. But, as with the other pieces of legislation mentioned that contributed to the creation of the housing bubble, it had unforeseen consequences. This well intentioned law ended up providing mortgage issuers with incentives to issue mortgages to borrowers that would be considered unqualified under traditional standards, and the amount of mortgages held by borrowers unable to make their payments grew to a level that caused systemic instability in the mortgage market as a whole.

Subprime Loans: Bad Bets

Explained simply, a home mortgage can be thought of as a bet placed by the lender that the borrower will be able to repay an amount of money plus interest, or that the real estate the borrower is purchasing will be able to serve as collateral and cover the debt plus the lender's related expenses in the case of default. When banks evaluate potential borrowers, they look at a variety of information to assess the borrower's quality, and if the borrower meets certain criteria that satisfy the lender a loan is made. Part of the Clinton Era regulations of the 1990's worked to enforce the Community Reinvestment Act by "setting quotas for mortgage lending to distressed communities and threatening sanctions for banks who did not meet them" (Hardaway). With these laws the government was effectively forcing banks to make bad bets and issue loans to borrowers that they normally would assess as unable to fulfill their obligations. The government compelling lenders to make loans to borrowers that they normally would not make pushed lenders to come up with an alternative to conventional mortgages that would help them better assess low quality borrowers, meet the imposed quotas, and still be able to cover their potential losses. The types of loans issued to unconventionally acceptable borrowers were called "subprime", and many of them existed at the time of the burst of the housing bubble.

Subprime loans are loans made to borrowers who do not meet conventional minimum standards for a loan. These loans come in many structures, but a common one is to start with a few years of low interest rising to a very high rate and coupled with a high refinancing penalty to keep the loan from being repaid early. Lenders do this so that they have time to collect information about the borrower during the first few years of the mortgage when payments are affordable. When the rate goes up, the borrower has the option to refinance with the original lender as a conventional mortgage or to walk away and lose the house. In theory this works for everyone since borrowers that look bad on paper get an opportunity to prove they can make payments and banks get time to gather more information about borrowers while still having the ability to profit through foreclosure. When mortgages like this are issued, the lender anticipates that home prices will continue to increase and that a foreclosed property will be able to sell at a high price in order to cover the original loan amount plus expenses associated with foreclosure and sale. In a world where home prices increase steadily this works well. The Community Reinvestment Act and other similarly minded policies pushed lenders to lend to unattractive borrowers, so a higher number of subprime loans existed than would have under conditions of normal market discipline without government intervention. With just a small drop in housing prices homes became underwater and subprime borrowers had a strong incentive not to refinance when rates went up and to simply allow the lender to foreclose to avoid paying more for the house than it was worth. When this happened thousands of times in a short period of time, there was an excess of foreclosed homes to be sold and a shortage of buyers who were losing confidence as prices dropped. Since the number of existing subprime loans was artificially high due to regulatory incentives the rate of foreclosures was higher than it would have been if most loans had been made to regularly acceptable borrowers when housing prices began to decline due to natural market fluctuation and correction. With foreclosures rising and home prices dropping there was no way for banks to “win the bet” and make money on foreclosed properties to cover the expenses of making the loan.

The Meltdown Begins

The loss of value that began with mortgages issued by traditional banks spread to other areas of the economy via large financial institutions, beginning with Bear Stearns in June of 2007. At that time, Bear Stearns closed two of its hedge funds that had lost deeply by investing in the mortgage market. By September 2008, it was obvious to economists and other observers that this crisis in the mortgage markets would continue to spread and turn into a larger problem:

> A full fledged global financial panic. As hundreds of billions in mortgage related investments went bad, the mighty investment banks that once ruled high finance crumbled or reinvented themselves as commercial banks. The nation's largest insurance company and largest savings and loan were seized by the government. Only the passage by Congress of a $700 billion bailout plan in October 2008 and actions by the Federal Reserve to pump money into the system headed off a full scale meltdown. (*New York Times*)

Soon after the crisis began in earnest the United States government was able to slow the further collapse of our economic system with its bailout plan. However, the damage had already been done in part and the collapse of several large systemically important U.S. financial firms caused a loss of investor confidence around the world. Between 2008 and 2010, other countries around the world began to experience their own financial crises. Their respective governments responded similarly to the United States government by intervening in their distressed economies and providing bailout money where they deemed it necessary to save systemically important firms. In 2010, the crisis "gained a second wind" (*New York Times*) in the form of the European Sovereign Debt Crisis. Information about the debt structure of several European nations beginning with Greece further scared off world investors and made it harder for anyone to get credit to do anything. This global element is what led the crisis to be labeled by many as the worst crisis since the Great Depression, and is still working itself out today as the global economy struggles to completely recover. The impact of the crisis is undeniable, but as the world looks back to find out what went wrong and attempt to prevent a future repeat many debates have arisen. Economists, academics, and industry insiders still have yet to agree on a single cause, beyond the trigger in the burst of the Housing Bubble, and many different sides point fingers in different directions.

<u>What Caused the Crisis?</u>

As mentioned earlier, the undisputed root cause of the financial crisis was the burst of the U.S. housing bubble. However, things become much less clear when questions of who caused the bubble to burst at the time it did, who acted improperly, and what policies allowed this to happen are asked. Different theories on what exactly caused the financial crisis ranging from misguided government intervention to criminal mortgage lenders have been proposed, but for each valid point that is made to single out a cause there are other arguments to exonerate it of singular blame. The derivatives market, credit rating agencies, the Federal Reserve, and the lending and borrowing practices for mortgages are the most widely cited claims, and are analyzed below.

The Derivatives Market

Much of the blame for the financial crisis is put on a class of financial products called over the counter (OTC) derivatives. They are called over the counter because they are traded in an unregulated market between parties, like over the counter drugs are available from a store without a pharmacist and prescription. They are called derivatives because they are financial instruments that derive their cash flows from other financial instruments. Examples of derivatives are forward, option, and swap contracts because their values are derived from underlying assets. The OTC derivative that gets the bulk of the negative attention relating to the Crisis is the credit default swap.

Credit default swaps (CDS) were invented during the 1990’s as a very profitable form of insurance. They function like insurance for the risk of default on a particular bond or security. The buyer of the swap protection pays an upfront amount and periodic premiums to the seller with the expectation that the seller will cover any loss on the face amount of the referenced security. In the large volumes of CDS that were traded before the beginning of the financial crisis, the underlying security was often sub-prime home mortgages. Issuers of mortgages or even third parties could buy these swaps for actual protection from default or as a form of speculation on the repayment of the mortgages. If a person thought that the default would happen, they bought the swap and paid the premiums hoping to receive the payoff when the default happened. If a person did not believe it would happen, they sold the swap to generate income from premiums and hope to never have to pay out any money. Speculators and lenders created a market that grew to trillions of dollars in value with these financial instruments, and as long as significantly fewer people defaulted than did not, the market continued to operate. Financial institutions such as banks and hedge funds issued credit default swaps and charged fees to generate a profit for insuring events that they never thought would happen. A major problem was that because they did not expect the insured events to take place issuers did not set aside enough money to cover their losses in a worst case scenario. In the early 2000's these swaps were traded freely among "sophisticated participants" in the market for them. A sophisticated participant is defined as someone like an investor from a large firm who represents an entity with over $10 million in total assets (Greenberger) and is expected to be knowledgeable enough to understand the risks of what he is doing. This unregulated market was established by the 2000 Commodity Futures Modernization Act. The act removed many types of OTC derivatives from trading oversight requirements. The size of the market at the time was estimated to be $80 trillion, yet was exempt from capital adequacy requirements, reporting and disclosure, protections against fraud, manipulation, or excessive speculation so that "in effect, almost no law applied to this market" (Greenberger).

Looking back, this unregulated market is viewed by some as a huge problem. At the time of the crisis the OTC derivatives market was estimated to have a notional value of $596 trillion with $58 trillion being in credit default swaps alone (Greenberger). According to Professor Michael Greenberger from the University of Maryland School of Law:

> The OTC market in credit default swaps and synthetic collateralized debt obligations provided the trigger that launched the mortgage crisis, credit crisis, and systemic financial crisis that threatened to implode the global financial system… Homeowners began to default on loans, leading to the failure of CDOs [collateralized debt obligations, a derivative that includes payments from mortgage backed securities] and triggering obligations of CDS issuers… Because they believed that the guarantees would never be triggered, issuers had not set aside sufficient capital to pay them off and therefore could not honor their contractual commitments. (Greenberger)

Holders of mortgage-based securities had prepared for the possibility of a decline in the mortgage market by taking out insurance policies in the form of CDS. They expected and paid for the guarantee that if their investments turned out to be bad, their losses would be covered in part by issuers of CDS. By being unable to pay off their obligations, firms who guaranteed CDS incurred losses that contributed to their insolvency and eventual failure. An often cited example of losses from CDS leading to failure of the firm which then led to the market instability of the crisis is the case of Lehman Brothers. Lehman Brothers was the first major firm to fall in 2008, and was also a guarantor of over 930,000 OTC derivatives (Greenberger).

However, the conclusion that the unregulated trade of OTC derivatives caused the financial crisis may not be entirely accurate. The fact that Lehman Brothers held over 930,000 contracts is made less sensational by the realization that dealers of OTC derivatives try to hedge each of their contracts with an offsetting contract, so the actual number of deals involved is about half of the total contracts held (Wallison). Peter Wallison, the Arthur F. Burns Fellow in Financial Policy Studies at the American Enterprise Institute, also explains that even though Lehman failed while holding all of those CDS guarantees, the counter parties to the guarantee did not necessarily incur losses by losing their insurance policy:

> What happened when Lehman failed? Clearly, its counterparty in the CDS on [company] A would not be paid, but what loss had the counterparty suffered? The answer is that Lehman's counterparty has suffered no significant loss unless company A has also defaulted. In that case Lehman would have owed its counterparty the notional amount, but was unable to pay. In the absence of a default by company A, Lehman's counterparty had a simple remedy – it could go back into the market and purchase another CDS to cover its exposure to company A… it is similar to what would have happened if a homeowner's fire insurer had failed before the homeowner had a fire… Although many markets froze at that moment [of the crisis], the CDS market continued to function, and most, if not all, of Lehman's counterparties probably covered their exposures with new CDS. (Wallison)

Similarly to Mr. Wallison's explanation, if a company had taken out a CDS as a guarantee against a security that was based on mortgage payments, they would not lose money immediately upon the failure of the issuer. This would only happen if coincidentally all mortgages that their cash flows were derived from became due and were left unpaid at that same moment. Since the cash flows of these securities are paid out over time it is likely that customers looking for a guarantee were able to find new ones in time to protect themselves, and that the purportedly devastating impact of firms failing to honor their CDS obligations may be over stated. Even if the OTC derivative market encompassing CDS and other more exotic instruments had been more tightly regulated and understood by the government, there may not have been much that could have been done to avert the financial crisis through stricter regulation of this area alone.

Credit Rating Agencies

Credit rating agencies are blamed for contributing to the crisis by not doing their jobs properly. They exist to rate securities and the firms that issue them with the hope of providing information to investors to limit adverse selection and moral hazard problems. Having information summarized in a rating scale works to ensure that only worthy issuers will receive funds by providing active outside monitoring. This monitoring is supposed to ensure that firms will do what they are supposed to in order to make a profit because they know that someone at a rating agency is watching and will inform future investors if things go wrong. Several problems with the credit rating agency system in the United States were evident before the financial crisis:

> (1) lack of competition- the only significant agencies are Moody's, S&P, and to a lesser extent, Fitch; (2) conflicts of interest - issuers pay the agencies to rate their securities and frequently pay them for consulting services on "credit enhancement;" and (3) little accountability for poor performance. As the performance of mortgage related securities deteriorated, the agencies downgraded a significant number of their ratings, thus raising questions about the accuracy of the initial ratings and the integrity of the process as a whole. (Black)

This clearly flawed system held immense power in the investment decisions made in the American economy prior to the crisis, and still does today. Individual investors count on it for an approximation of the safety of a company's stock, and institutional investors count on it for assessments of the quality of complex securities and derivatives that they are looking to purchase. Before the crisis the U.S. government made an effort to address problems of accountability and competition in the industry with the 2006 Credit Rating Agency Reform Act, but it has been criticized as a "modest piece of legislation that seeks to solve these intractable problems through increased competition and disclosure" (Black). The Act allows the SEC to create reporting and oversight rules to remedy conflicts of interest, but requires that the rules be "narrowly tailored" to what is set described, and "forbids the SEC from regulating ‘the substance of the credit ratings or the procedures and methodologies’ by which the credit agencies determine ratings” (Black). This act addressed some of the problems with the rating agencies, but did not go far enough to effectively fix them all. The role of credit rating agencies in the crisis becomes even more evident with the knowledge that in the beginning of the crisis the SEC examined their role and found that due to the increasing complexity of financial instruments leading up to 2008, “staff at the agencies could not keep up with the workload” (Black) and that “one analyst expressed concern that her firm’s model did not capture ‘half’ of the deal’s risk” (Black). However, while the ratings system is undeniably flawed, the sophisticated investors and professional financiers involved in the deals that contributed to the financial crisis would have known better than to blindly follow an externally generated rating scale. It is likely that large firms that failed such as Lehman Brothers and AIG did not base their entire strategies on high ratings provided by the agencies, and that while the agencies gave them some questionable information, they did not directly cause their actions or define their strategies.

The Federal Reserve and Interest Rates

As described earlier, there has been a long series of government policies that promoted the dream of owning a home for all Americans, and this is something that is generally supported by the American public. However, in doing this with the passage of laws like the Community Reinvestment Act and policies of arms of the government such as the Federal Reserve, government intervention may have caused the mortgage markets to function less efficiently and contributed to their role in the financial crisis. Monetary policy is conducted by the U.S. government through the Federal Reserve System. The Federal Reserve is the central banking system of the United States. It is responsible for overseeing the monetary policy of the United States with the goals of maintaining maximum employment, stable prices, and moderate long term interest rates. It also protects this monetary policy by supervising and regulating banks, looking out for the stability of the financial system, and insuring the deposits of individuals in banks to prevent panics. It controls interest rates by controlling the money supply;

increasing the money supply to lower interest rates, and decreasing the money supply to raise them. This works because in keeping with laws of supply and demand as more money is available it is cheaper to borrow, and as less is available it becomes more expensive which is represented by higher interest rates. By keeping rates low the Federal Reserve hopes to increase borrowing and spending, stimulating the economy and growth. However, if rates stay too low for too long inflation can happen and create a situation where there is an excess of money to purchase the same quantity of goods and services that existed when there was less money in circulation, so prices rise and money is worth less. Keeping interest rates low increases purchasing power for individuals and businesses which speeds economic growth and "during the twenty year period from about 1982 to 2002, the Federal Reserve did a remarkably good job of adjusting interest rates to support steady economic growth without triggering inflation" (Miller). In the early years of the 2000's the interest rate had been kept low by the Fed for many years, but it continued to look for inflation in the economy and did not find it. There was still steady growth so everything seemed to be going well. However, the unforeseen result of this monetary policy was a steep and unsustainable rise in the price of housing:

> From 2002 through 2005, however, housing prices were increasing rapidly… As we now know, this was a bubble. Having left interest rates too low for too long, the Federal Reserve had supplied the credit that people – many people --were using to buy houses. This is hardly surprising, and it was a perfectly reasonable response from consumers. When the price of anything falls, people buy more of it, and so when the price of borrowing money (that is, interest rates) falls, people borrow more. The supply of housing does not increase as quickly even when prices are rising (as economists say, the supply of housing is inelastic), because it takes a considerable period of time to build a new house and because, at least in many areas, the supply of available land on which to build is severely limited. Hence, when demand for

housing shot up because there was so much credit available to buy houses, the supply of housing did not increase as fast as the demand. Housing prices thus rose sharply. (Miller)

By providing so many people with the ability to purchase homes for so long the Federal Reserve, through its monetary policy of low interest rates, contributed to creating the housing bubble. In combination with the laws that supported and subsidized home ownership among Americans the Federal Reserve's policies encouraged levels of mortgage borrowing that would not have otherwise been possible. This however was not the sole cause of the financial crisis. The Federal Reserve tailored its monetary policy to what seemed to make sense at the time. The Federal Reserve acted in the way that it should have based on the intellectual consensus about the economy, so it can be argued that most qualified people who would have found themselves in decision making positions at the Fed would have done the same. After the very successful years of growth from 1982-2002, most people believed that the Federal Reserve had found a way to sustain low interest rates long term without inflation (Miller). Because of changes in economic fundamentals like robust growth in jobs and incomes, low mortgage rates, steady rates of household formation, and limited expansion of the housing supply in some areas which accompanied the rise in housing price it seemed to most observers, even as high of an authority as the Chairman of the Federal Reserve Ben Bernanke, that this could be sustained long term and was good policy (Miller).

Lending and Borrowing Practices

It has also been argued that the lending process for home mortgages had become inherently flawed in the years before the crisis, and that bad practices on the parts of lenders and borrowers caused the numbers of failed mortgages that overly strained the markets. Rumors and stories circulate about borrowers putting down no down payment and taking out 100% leveraged mortgages with no intention of ever making long term payments. There are also stories of "predatory lending practices" and mortgage issuers who effectively scammed their customers. They are said to have done this with adjustable rates that would go up after a few years or be swapped out prior to closing for higher ones. Some lenders are said to have done this rate switching unbeknownst to the borrower, and to have issued mortgages to people that they knew would not realistically be able to make their payments. Certainly, both types of this abuse of the mortgage lending system took place in the United States in the years leading up to the financial crisis. But, to argue that a large enough portion of lenders were predatory or that a large enough portion of borrowers were planning on not making their payments to cause the entire financial crisis is unrealistic. The shift in the process of issuing mortgages from individual loan officers at local banks evaluating their neighbors for loans to standard computerized loan applications approving borrowers based on algorithms “created an undeserved market for home loans – people who really could pay back the money if given a chance but who did not meet standardized underwriting criteria” (Miller). So yes, some mortgage applicants in this pool knew that they ran the risk of being unable to make their payments and took mortgages anyway, but many of them were looking for a genuine chance at home ownership and either successfully paid or for other reasons were unable to and defaulted. Similarly, while there were certainly lenders who tricked their customers in order to increase profits or to meet a quota, on the whole it made sense for lenders to keep on lending to almost anyone who wanted to borrow. With the overwhelming data and public opinion before the crisis suggesting that housing prices would continue to rise, making even clearly risky loans to anyone appeared to be a smart way for lenders to make money. If anyone defaulted the house would still be worth more when it was repossessed than when it was sold, so it seemed like a win-win situation for the lender. It is convenient to place the blame for the crisis on a group of people, but it is also unfair. According to Professor Robert Miller from the Villanova University School of Law:

> Although the search for the villains behind the financial crisis is human and understandable, a felt need does not make a real fact. Moralizing critics blame virtually everyone involved in the housing market, but in reality virtually all of these people were entirely innocent. They were

> trapped in a market bubble, and certainly none of these people, whether individually or even collectively, engaged in any moral wrongdoing that caused the bubble and the burst. (Miller)

It is difficult to place the blame for causing the financial crisis on a specific policy or group. In reality, many different causes, and more still in addition to those covered above, kept inflating the housing bubble over nearly 100 years. These factors inevitably culminated in its eventual burst causing the worst financial crisis since the Great Depression in the year 2008. A complete regulatory response to the crisis will need to promote economic stability by acknowledging that a multitude of factors come together to create financial crises. In addition to addressing the economic causes of crises the legal environment outside of the mortgage market that spawned the crisis must also be understood and remedied if necessary. To understand the legal environment that allowed the financial crisis of 2008 to happen, it is necessary to look back and see how regulation of the financial system evolved since the beginning of its modern existence.

Evolution of the Legal Environment

The financial regulatory system of the United States in the years before the 2008 crisis was comprised of laws made in response to the Great Depression and amended to attempt to meet the changing needs of the past century. One of the most significant pieces of legislation that provides a basis for U.S. financial regulation, the Banking Act of 1933, was a direct response to the perceived causes of the Great Depression. That law, and several others that modified and updated it over the next 75 years, constituted the backbone of the regulatory system as it was in 2008. Most strikingly, this presented a problem because of the massive differences in technology and financial engineering of products that existed from the time the laws were created to the times that they were still being used to regulate the actions of the financial sector. As Harvey Pitt, the twenty sixth Chairman of the U.S. Securities and Exchange Commission said:

> The regulatory system governing our dynamic, rapidly evolving capital markets, is, and for quite some time has been, badly broken. Largely devised during the New Deal, after the last collapse of our financial services industry, the regulatory system consists of a multitude of federal statutes – each purporting to govern one segment of the industry with its own regulations and regulators. Added to this is a layer of frequently overlapping state and local statutes and regulations, and the result is a thicket of statutes, a tangle of regulations, and an alphabet soup of agencies, including more than fifty regulators each for insurance companies, securities broker-dealers, and commercial and investment banks, and that does not even include commodities, credit unions, and allied regulators. (Pitt)

Because of this overabundance of regulations it is nearly impossible to document them all in one place, so this section will focus on the most meaningful and often cited pieces of legislation with regard to the recent financial crisis.

The Great Depression: Parallels

It is important to look at the Great Depression when considering how to respond to the financial crisis of 2008 for two reasons. The first has been explained, that the regulatory system in the United States prior to 2008 evolved from legislation passed in response to the Great Depression. The second reason is that there are many parallels between the Great Depression and the financial crisis of 2008, which has often been called the "worst financial crisis since the Great Depression" and is similarly named when called the "Great Recession". In looking at these parallels, it becomes easier to see what common themes contribute to American financial crises. It is also beneficial to evaluate the legislative response to the earlier crisis in order to learn to avoid mistakes and repeat successes in responding to the current one. The first parallels between the two crises are found in their attributed causes.

Both crises were in part created by actions of the Federal Reserve. Prior to the Great Depression, the Federal Reserve had kept interest rates artificially low during the 1920's similarly to the low interest rates seen in the 2000's (Folsom). This common player in the causation of the crises indicates that the Federal Reserve is a good place to begin when looking for institutions to reform. A second parallel between the crises is that three of the Presidents involved, Roosevelt, Hoover, and Obama, responded with massive spending. This spending was intended to trigger economic expansion, but in both instances also increased the federal debt substantially, almost doubling it (Folsom). These spending programs did not greatly increase unemployment as intended, since "in the 1930's unemployment fluctuated, but recovery never occurred" (Folsom) and "when Obama took office unemployment was at 8 percent, and in the next year it steadily increased to over 10% before falling just under that mark" (Folsom). Also in both instances the current government attributed the crisis to Wall Street bankers and corporate leaders. Roosevelt blamed the "economic royalists" (Folsom) on Wall Street for refusing to invest after the Depression similarly to the "Wall Street vs. Main Street" theme commonly reiterated during Obama's first election campaign. Like Roosevelt, Obama suggested that the moneyed class of financiers caused the pain being felt by the average American. It cannot be debated that Wall Street financial professionals contributed to and directly participated in these financial collapses, but the immediate finger pointing by these two Presidents is similar in that both times they were quick to blame an external source before examining government policies and actions. Finally, the United States government after both crises responded with legislation that was intended to be an overhaul of the current financial regulatory system. The Obama administration's response with the Dodd-Frank Act is in its early stages of implementation, but the Banking Act of 1933 which was passed in response to the Great Depression has been studied for decades.

Both legislative responses aimed to condense and overhaul the previously existing regulatory system that was decentralized and too complex to be effective. Before the stock market infamously crashed in 1929, "the securities markets in the United States were primarily regulated by state statutes known as 'blue sky laws'. These statutes created an inconsistent patchwork of regulation that was largely ineffective in preventing fraud and in regulating securities transactions within the United States" (Chaffee). This patchwork state is similar to the state of financial law prior to the Crisis of 2008 which will be discussed later; however, it is important to note when comparing the Banking Act of 1933 and the Dodd-Frank Act that both regulatory responses were crafted with the intent of resolving the patchwork of regulation that contributed to confusion and regulatory arbitrage which complicated the onset of both crises. It is known that this effort succeeded in 1933 because in the aftermath of the Great Depression "coordination and cooperation on the national level ushered in an era of relative financial stability in the United States that lasted for the remainder of the twentieth century" (Chaffee). In examining what brought on, and then ended, that period of financial stability after the Great Depression information can be learned that will be helpful in repeating and sustaining this result today.

The Banking Act of 1933: Glass-Steagall

The Banking Act of 1933 was a comprehensive banking reform in response to the Great Depression. It established the Federal Deposit Insurance Corporation, separated commercial and investment banking, imposed stricter regulations on financial institutions, and did other things like increase minimum capital requirements with the intent of reducing the rate of bank failures (Komai, and Richardson). The four sections that limited commercial banks' securities activities and their affiliations with securities firms are referred as "the Glass-Steagall Act". These sections are named after Senator Carter Glass and Representative Henry Steagall, the two members of Congress who sponsored the bill. Similarly to what is happening with the Dodd-Frank Act today:

> Congress recognized that certain abuses in the financial community had contributed to the banking panic…. And it sought to rectify those abuses through prophylactic legislation creating a "wall" between activities of the investment and commercial banking industries. (Heppt)

Creating this "wall" meant that there would be complete separation of commercial from investment banking. Commercial banks were required to sell their securities affiliates within one year and were then only allowed to purchase or sell securities on order and for the accounts of customers. Securities underwriting by commercial banks was prohibited, along with affiliations that were too close with securities companies, and firms that sold securities were no longer able to take deposits (Folsom). All of this was done in order to “avoid future abuses, and thereby maintain public confidence, in the national banking system” (Heppt). Then, as now, it was recognized that maintaining public confidence in a nation’s banking system is central to the healthy functioning of its economy. When confidence is lacking people will save their money at home outside of financial institutions that channel funds from savers to users, and therefore slow down economic growth because of a lack of funds available to invest productively.

At the time erecting a complete wall between commercial and investment activities was seen as a drastic, but necessary, solution. Before the Great Depression hit many banks were engaged directly in securities activities. They did underwriting for corporate clients, distributed the offerings as broker-dealers, and let customers purchase securities offerings on credit. In addition to all of this activity the banks encountered a conflict of interest by speculating on long term securities with bank funds, which tied them up in investments so that they could not be used for withdrawals. Having all of this capital tied up in securities created a situation where “many banks were unable to meet their obligations and were forced to close their doors when the stock market crashed in 1929 and depositors demanded their money” (Heppt). The government imposed restrictions on the activities of banks and Federal deposit insurance in order to ensure the public that such a situation would not happen again. Transitioning from the “relatively unregulated banking structure of the 1920’s” (Heppt) to a system with codified regulations required some drastic measures. The wall fully separating commercial and investment banking activities made sense for the United States financial sector until later in the 20th century, when during the 1980’s it severely restricted the activities of commercial banks in dealing with new financial products that had been developed and limited their competitiveness against other institutions that were unrestricted.

The Gramm-Leach-Billey Act of 1999

Fifty years after its passage, during the 1980's, the Glass-Steagall Act proved to be outdated. Changes in regulatory schemes that gave authority to Federal agencies, state laws, self-regulating industry associations, and exchanges where financial products were traded created a complex and sometimes restrictive regulatory environment. The combination of new technologies and changing regulations worked together to produce "products and services that were unanticipated when Glass-Steagall was passed in 1933" (Heppt). How could Congressmen of the 1930's have imagined the changes that computers, cell phones, and the internet would bring to the financial industry? Other motivations such as the free-market philosophies becoming popular at the time and increasing global competition against competitors in less regulated environments (Komai, and Richardson) also pushed the drive for legislative change in the late 20th century.

After experiencing market turbulence in several industries during the 1970's, 80's, and 90's Congress was under pressure to act to fix the regulatory system. Some court cases working to erode the Glass-Steagall wall, legislation that was aimed at fixing issues that were small in scope, and active lobbying efforts by the commercial banking industry further added to this pressure. These lobbying efforts were intended to persuade Congress to repeal parts of Glass-Steagall so that commercial banks could regain competitiveness that had been lost as a result of disadvantages stemming from the prohibition on investment banking activities. It also helped that in addition to the prevailing attitude favoring deregulation:

> Empirical academic research – some as early as 1941 (!) and continuing through the 1980s and 1990s – increasingly showed that the perception of the harms from the pre – 1933 mixing of

commercial banking and investment banking, which underlay the passage of the Glass-Steagall Act, had little factual basis. (White)

In 1998 Citicorp, a firm which fell under the commercial banking category, began the process of acquiring Travelers Group, which was an insurance company classified as an investment bank. The parts of the Glass-Steagall wall that remained at the time did not allow banks and insurance underwriters to operate within the same company, and this high stakes merger “which the Federal Reserve approved on an interim basis, provided the immediate impetus for Congress to act” (White). On November 12, 1999 President Bill Clinton signed the Gramm-Leach-Billey Financial Services Modernization Act in to law. The act’s stated purpose was to “enhance competition in the financial services industry by providing a prudential framework for the affiliation of banks, securities firms, and other financial service providers, and for other purposes.” In pursuit of this goal the act did many things, but, relevant to the analysis on its contribution to the legal environment preceding the financial crisis of 2008, the most important thing that it did was repeal sections of Glass-Steagall. Gramm-Leach-Billey specifically repealed some of the sections of the Glass-Steagall Act that prevented the affiliation of commercial and investment banks. This paved the way for the creation of the enormous financial conglomerates that exist today, a fact that has been met with mixed criticisms.

Arguments in favor of Deregulation

At the time, Gramm-Leach-Billey was hailed as a step in the right direction. Its greatest benefit was to “enhance the ability of commercial banks to compete against so called ‘shadow banks’” (Mitchell). Shadow banks are financial institutions that grew to prominence in the latter half of the 20th century which “are firms that hold assets similar to commercial banks’, but with liabilities more like investment banks” (Date, and Konczal). While not technically or legally banks since they do not take traditional deposits, they hold similar assets such as mortgages or other loans. To fund these assets they use methods similar to those employed by investment banks such as asset backed commercial paper. Money market funds, hedge funds, government sponsored entities such as Fannie Mae and Freddie Mac, finance companies, and pension funds are all part of the shadow banking system that rely on the capital markets for funding instead of the customer deposits relied on by commercial banks. These shadow banks are subject to fewer regulations than other institutions, and therefore are able to operate more freely. This increased freedom of operation allowed them to provide much higher returns than commercial banks in many cases, and they:

> Began to supplant the commercial banking system in the 1970's, as rising interest rates induced savers to shift from bank accounts, which were subject to regulator caps on interest rates, to mutual funds; mortgages migrated to Fannie Mae and Freddie Mac; corporations abandoned bank loans for commercial paper that carried better terms, and the auto and other consumer loans moved to finance companies. Although the commercial banking sector continued to grow, its dominance of the financial system receded. Commercial banks' share of total financial assets declined by more than half in the 25 years leading up to GLBA. (Mitchell)

The ability of the shadow banks to secure funding at a lower cost and offer higher, uncapped returns made them more attractive to investors. With all of these advantages the "shadow banks grew to more than half of the U.S. financial system" (Mitchell), so Congress and the conventional banking industry agreed that something must be done to remedy ineffective laws that were stifling competition. The restrictive effects of the financial regulatory system in the 1980's and 1990's, especially the Glass-Steagall wall, were seen as detrimental to economic growth and a hindrance to the competition necessary for an efficiently functioning economy. The logic behind the passage of the Financial Modernization Act and the general attitude that favored deregulation before the financial crisis was based on several premises:

> (1) that widening the scope of banks' activities would allow them to reverse a long term secular decline in competitiveness; (2) that non-depository 'shadow banks' should continue to compete in the banking business, because free market discipline would force them to make sound credit risk-return decisions; and (3) that even If shadow banks failed to make good credit decisions, their resulting bankruptcies would not result in taxpayer harm. (Date, and Konczal)

For a long while these ideas appeared to be a solid basis for theories favoring less regulation. These ideas specific to the banking industry were echoed in broader terms regarding the United States financial sector in general.

Beyond the issues with commercial banking within the United States economy there were concerns about restrictive regulation hurting American competitiveness on a global level. As technology increased globalization in the late 20th century it was clear that the United States' role as the number one economy, best capital market, and exemplar securities regulator was being challenged. Securities markets outside of the United States grew in size and sophistication, domestic economic growth slowed, investors increasingly placed funds outside of the United States for diversification purposes, and technological advances provided all investors with up to the minute information about investment opportunities around the world (Chaffee). Because of these and other factors that contributed to the decline in prominence of U.S. markets "many have pushed for the deregulation of the United States financial system to help maintain its dominance in terms of its capital markets and its role as a securities regulator… in light of the forces threatening the dominance of the United States, the behavior of these deregulationists is arguably both rational and laudable" (Chaffee). Proponents of deregulation argued that in a free market, the markets could look after themselves. The thinking goes that it is in the interest of the financial sector to operate smoothly and grow steadily, so all participants should be expected to act in ways that foster stability and support smart risk management. Advocates of market self-discipline "charged that the [SEC] Agency's heavy-handed regulation put the U.S. capital markets at a competitive disadvantage" (Black), and that loosening the rules would restore some advantage. Even an authority as high as the U.S. Department of Treasury as late as March 2008 argued that "U.S. regulatory structure is not optimal for promoting a competitive financial services sector leading the world and supporting continued economic innovation at home and abroad" (Black). The arguments and resulting policies favoring deregulation of the financial sector took hold and became the law of the land prior to the latest financial regulatory overhaul with the Dodd-Frank Act. As Professor Eric Chaffee from the University of Dayton School of law observed after the crisis:

> The problem, however, is that the deregulationist movement was too successful, because the movement instigated the failure to properly regulate the mortgage-backed securities that were at the heart of the financial crisis. As previously explained, improvidently granted mortgages in the United States were ultimately securitized and sold to investors as mortgage-backed securities. When the default rate on the mortgages increased dramatically, the mortgage-backed securities were devalued and the financial crises ensued. While all of this was happening, the SEC and other financial regulators were taking a "hands off" approach in hopes of maintaining the financial dominance of the United States. (Chaffee)

The arguments for deregulation made sense for the relevant issues at certain times, but on the whole, the philosophy of financial deregulation and its proponents that got it instituted may have gone too far. Since the financial crisis critics of deregulation have been more vocal than ever, and calls to regulate previously unregulated areas of the financial sector have been answered in part with the Dodd-Frank Act. Still, in the wake of the financial crisis, proponents of deregulation argue that "adding layers of additional regulation is hardly a viable solution at a time when homebuyers are already faced with documents and government mandated disclosures in heaps of paper often stacked a foot high at closing" (Hardaway), and would still like to see the financial sector operate more freely with less restrictions all the way from the largest financial institutions at the top down to individual home buyers.

Arguments for more extensive regulation

Many place the blame for the financial crisis on an unregulated derivatives market, faulty credit rating agencies, and mortgage lenders that were not watched closely enough. Those in favor of further regulation argue that "deregulation and insufficient regulation were the ultimate culprits in the credit crisis, fed by the greed of financial manipulators, incompetent or disinterested regulators, unscrupulous speculators, and to a lesser extent, homeowners themselves" (Hardaway). All of these areas face calls for specific regulatory changes, but there is also an overall desire by some to see the financial sector of the U.S. economy restrained in general. As Professor Barbara Black from the University of Cincinnati College of Law said; "I submit that we need never worry about over-regulation; business interests have many well-funded and effective lobbyists, including the securities and accounting industries, small business, and the U.S. Chamber of Commerce, to make sure that this does not happen" (Black). Those who echo this sentiment believe that lawmakers and the general public should be concerned with regulating the financial sector for the protection of consumers, not worrying about stifling the ability of the financial sector to innovate and make profits because they already do a fine job of that without outside help. Some, such as Senator Dick Durbin, go as far as to say that "the banking industry is the 'most powerful lobby' in Congress and 'they frankly own the place'" (Ramirez). It is easy to see how such a powerful industry which donates to the campaigns of both candidates in Presidential elections and spent $450 million to lobby policy makers in 2008 alone (Ramirez) holds enough political power to get laws made that it sees as beneficial to itself. Professor Steven Ramirez from Loyola University Chicago believes that "the influence of banks presents a challenge to the legal system" (Ramirez) and that in their pursuit of "too big to fail" status to be protected by government bailouts they create ever higher levels of systemic risk in the economy. He argues that as a result of the "orgy of reckless financial management" (Ramirez) leading up to the financial crisis and the resulting government bailouts that regulations need to be created to “put creditors of large, systemically important financial institutions at risk of loss” (Ramirez).

The common theme shared by these two academics in their essays regarding the 2008 financial crisis is that laws should be made to protect the American economy and people, not to cater to the powerful and sometimes reckless financial sector. They argue for “harsh criminal and administrative penalties” (Ramirez) to follow reckless conduct by executives that lead to bailouts, penalties which do not exist today. Overall, arguments for further regulation do not seek to limit the financial sector in ways that will hurt their productivity, but seek to place limits on the actions of these firms that will promote accountability and overall economic stability. Professor Black argues that:

> First, we must get rid of the ‘hands off’ attitude toward institutional and sophisticated investors that is ingrained into the regulatory climate. For too long, policymakers have thought that some investors are so smart that regulators should not stand in their way, for fear of stifling innovation and investment opportunities. We have learned, once again, that the “smart money” is not so smart, and, more importantly their errors are colossal ones that impact every aspect of the economy and harm all of us. (Black)

Proponents of increased regulation for the financial sector advocate looking out for the interests of the American economy, and therefore the greatest number of Americans, rather than the interests of one segment of the economy, the firms within it, and the individuals who stand to profit from their activities. The call for regulatory reform in the aftermath of the financial crisis was answered by the Obama Administration with the Dodd-Frank Act, reversing the trend of financial deregulation with a 2,319 page document which calls for regulators to create 243 rules, conduct 67 studies, and issue 22 periodic reports to various government agencies.

Regulatory Response: The Dodd-Frank Act

The Dodd-Frank Act, also known as the Wall Street Reform and Consumer Protection Act is the most comprehensive financial regulatory reform since the laws that were passed in response to the Great Depression. Its stated purpose is as “an Act to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end ‘too big to fail’, to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes”. It achieves these goals by directing the creation of rules by agencies which are focused on changing capital investment rules for banks and insurance companies, further regulating hedge and private equity funds, increasing requirements for professional investors to become registered and accredited, increasing data that public companies are required to report, enforcing equitable access to credit for consumers, and providing incentives to promote banking among low and medium income Americans. It modifies the rules for existing regulatory agencies, and also creates a few new ones. The FDIC, U.S. Securities and Exchange Commission, the Comptroller, The Federal Reserve, and the Securities Investor Protection Corporation were all significantly modified, and the Office of Thrift Supervision was eliminated entirely. The legislation created the Financial Stability Oversight Council, the Bureau of Consumer Financial Protection, and the Office of Financial Research as new regulatory agencies.

The Office of Financial Research was created to feed data into the other two agencies. It exists within the Treasury Department to improve the quality of existing financial data available to the government and public. It is tasked to amass and organize data to enhance further analysis of the financial system and the economy at large. It will maintain two public databases, one detailing the types of financial instrument in existence, and a separate database of the financial entities and organizations in existence currently. The OFR is responsible for one of the many annual reports to Congress mandated by the Act through its Financial Research and Analysis Center. Their report will be focused on emerging systemic risks.

The Financial Stability Oversight Council was made to do what its name implies, monitor the financial stability of the United States. It is chaired by the Secretary of the Treasury and is there to monitor excessive risks to the financial system like the ones that were present but overlooked by the government prior to 2008. These stresses were due to the strain on and eventual failure of the tangled web of relationships between the largest bank holding companies and non-bank financial institutions, so naturally data on these relationships is the type of information that the FSOC will be scrutinizing. Another reason that the Council is there is to facilitate efforts to eliminate the “too big to fail” status of any one company in the United States economy. They will do this by encouraging communication among financial regulators and regulatory agencies so that they can better understand the interconnectedness of firms, which is one of the main characteristics in creating too big to fail status . Certain companies in reality being too big to fail without destroying the entire economy pose a significant threat to overall financial stability, and this condition in particular along with the other sources of systemic instability are to be monitored and remedied by the Financial Stability Oversight Council. The FSOC has the regulatory authority to dismiss financial regulations published by the Bureau of Consumer Financial Protection if those regulations were to threaten the stability of the economy.

The Bureau of Consumer Financial Protection is the most interactive and far reaching agency created by Dodd-Frank. It is intended to directly inform consumers to ensure that they understand the risks associated with debt and financial instruments that they may encounter or wish to invest in. Title X of the Act creates it and outlines its task to make markets for consumer financial products and services work for all Americans. These services inhabit a wide range from student loans, to home mortgages, to credit cards, to complex investment vehicles. It is located inside and funded by the U.S. Federal Reserve, but is independent of the Fed and only temporarily affiliated with the U.S. Treasury Department until it gets off the ground. The Fed may not interfere with matters decided by the Director of the CFPB, direct any employee, change any functions or responsibilities of the Bureau, or impede any order of the Bureau. The Bureau is given jurisdiction to write and enforce rules, conduct examinations, monitor and report on markets, and track consumer complaints over a wide variety of financial entities. These entities include commercial banks, credit unions, payday lenders, securities firms, foreclosure relief services, mortgage servicers, credit card firms, and debt collectors to name a few. Its most pressing concerns are areas that affect most Americans; mortgages, credit cards, and student loans. Its purpose is explained in Section 1021 of the Act which States: “The Bureau shall seek to implement and, where applicable, enforce Federal consumer financial law consistently for the purpose of ensuring that all consumers have access to markets for consumer financial products and services and that markets for consumer financial products and services are fair, transparent, and competitive”. To accomplish regulation over such a wide variety of areas the Consumer Financial Protection Bureau streamlines the oversight of responsibilities from many of the aforementioned regulatory bodies that were modified by Dodd-Frank. It took over some mandates of the Federal Reserve, Federal Trade Commission, and even the Department of Housing and Urban Development in areas where home mortgages and lending are concerned. It is divided into six Divisions to accomplish its goals. These Divisions are ‘Supervision, Enforcement, and Fair Lending’, ‘Research, Markets, and Regulations’, ‘Office of the Chief Operating Officer’, ‘General Counsel’, ‘Consumer Education and Engagement’, and ‘External Affairs’.

The Volcker Rule

The most controversial aspect of the Dodd-Frank Act is referred to as “the Volcker Rule”. It is a specific part of the Act, contained in Sections 619-621, based on ideas proposed by Paul Volcker, a former Chairman of the Federal Reserve. The rule reinstates some of the Glass-Steagall era limits on speculation and investment banking activities by commercial banks, with many exceptions. The form of the Volcker rule which was made law within the Dodd-Frank Act is:

> Weaker than his [Volcker's] original proposal, [it] will restrict banks' proprietary trading (dealing in securities and other financial instruments for the firm's own profit, rather than on behalf of customers), impose additional capital requirements on shadow banks engaged in proprietary trading, and restrict banks' ownership stakes in hedge funds and private equity funds. (Mitchell)

If successfully implemented through agency rulemaking doing this will further separate commercial banking from some high risk activities that place them in a position of overexposure. In 2009 while testifying before the Senate Banking Committee Volcker expressed that:

> He hoped, through these reforms, to end 'too big to fail' and the era of government bailouts, and to change the expectations of banking institutions to reduce moral hazard. He hoped that with the adoption of the proposed procedural safeguards, the government would step in when a bank failed – not to bail out the institution, but to facilitate an orderly liquidation of its assets. Chairman Volcker advocated that banks should expect 'euthanasia, not a rescue'. (Gary)

This call for decisive action was echoed by Senators Jeff Merkley and Carl Levin who sponsored the Merkley-Levin Amendment to the Dodd-Frank Act to implement the Volcker Rule. President Obama also supported the Volcker Rule, saying that, "Banks will no longer be allowed to own, invest, or sponsor hedge funds, private equity funds, or proprietary trading operations for their own profit, unrelated to serving their customers" (Gary). As proposed, the Rule broadly prohibited proprietary trading and bank involvement in hedge funds. It offered a few exceptions to this prohibition, but also was preceded by the phrase "Unless otherwise provided in this section" (Gary) which ended up being used and interpreted to significantly weaken it. In 2009 when the law was being created there were roughly two thousand Wall Street lobbyists taking part in a $600 million campaign to represent their interests and lobby for loopholes that would make sure the Volcker rule was not too strict (Gary). This campaign was successful to the extent that after seeing the final version of the Rule and Act, Volcker said that "the bill went from what is best to what could be passed" (Gary). The biggest problem with the changes made from proposal to passage was an expansion of permitted activities for regulated financial institutions that allows them to still participate in hedge funds, although less directly than was allowed before, if certain loophole conditions are met (Gary). The Rule still did a lot to reinstate the wall between commercial and investment banking activities within the reality of the modern financial sector to mitigate excessive risk taking, but, as with the Dodd-Frank Act as a whole, it was criticized by many for not going far enough.

Criticisms

In addition to the weakness of the Volcker rule's final form one heavily criticized feature of the Dodd-Frank Act is its delegation of rulemaking to regulatory agencies after mandated studies examining the relevant issues. On one hand, this is a good strategy because it allows those who are most informed to make the specific rules after careful study, but on the other hand it fragments the Act's authority over the span of time and different agencies and allows for further watering down of the Act's original intentions. In a scathing criticism, Professor Chaffee writes:

> The Dodd-Frank Wall Street Reform and Consumer Protection Act is at best an incomplete vision for increasing consumer protection and heightening corporate responsibility. Despite calls from the Obama Administration and the United States Department of the Treasury for a new foundation for financial regulation in the United States, Congress's response failed to satisfy these calls because the foundation created by the Dodd-Frank Act is cracked, fragmented, and incomplete. In many regards, the Dodd-Frank Act is simply an invitation for regulation based on the myriad of studies that it requires to be conducted for purposes of future regulatory action. Worse yet, the Dodd-Frank Act fails to confront the realities of the emerging global financial markets by focusing almost exclusively on domestic issues, while failing to address new international realities. (Chaffee)

This perspective offers the view that the Act did not really accomplish much at all. With most of the rule making and enforcement to be done well into the future, the Act does not have the immediate effect of overhauling the regulatory system that it appears to at first glance.

The Act addresses concerns about areas of the economy thought to have contributed to the financial crisis and acknowledges them, but does not immediately remedy their respective issues. Concerns about the previously unregulated OTC derivatives market are addressed by establishing a framework for the regulation of that market, but leaves the regulation in a state of uncertainty. It dictates that in the future, “joint regulators will have the power to determine which types of swaps will have to be cleared through a CCP [central counterparty clearing house] and which swaps will be exempt from such clearing requirements” (Evanoff, and Moeller). The clear problem with this is that the types of swaps that will be exempt are not yet determined, and could end up being of the same type that are blamed for contributing to the financial crisis in the first place. To address the problem of low quality loans the Act set up the CFPB which will inform consumers about products to prevent predatory selling practices, give new underwriting standards for residential mortgages, place risk retention requirements on issuers of securitized mortgages, and increase regulations on credit rating agencies that rate asset backed securities to limit conflicts of interest. But, it does not address the “mispriced government guarantees in the system that led to price distortions and an excessive buildup of leverage and risky credit” (Richardson) in mortgage related markets. The Act outlines a new resolution process for failed financial institutions, specifically ones that are systemically important, but not for the resolution of a banking crisis like the one that occurred in 2008 where multiple institutions fail simultaneously (Richardson). The Act addresses concerns about the shadow banking system indirectly in Title I by allowing some nonbank institutions to be designated as systemically important and have to follow stricter regulations, in Title IV by calling for the registration of hedge funds, in Title V by calling for a study of insurance companies, and in Title IX with rules for greater transparency of the mortgage securitization process (Richardson). However, even with all of these rules that indirectly will come to regulate the shadow banking system;

> There is no specific title on shadow banking. Analysis of shadow banking and corresponding regulation of these entities, therefore, are left to working groups and task forces at the various regulatory agencies. Without the full support of the Dodd-Frank Act it remains to be seen what these new rules will look like. (Richardson)

As with the way the Act addresses most of the other attributed causes of the financial crisis, its method of dealing with the shadow banking system is incomplete and depends on future rulemaking by government agencies.

Finally, the Dodd-Frank Act is criticized for its failure to address the global nature of both the financial sector and the ensuing crisis of 2008. It addresses systemic risk within the United States economy in detail, but “Congress’s efforts to raise international regulatory standards and improve international cooperation, however, were limited at best” (Chaffee). As discussed earlier, increased global competitiveness has decreased the premier role of the United States in financial matters. The deregulatory trend in the years prior to the financial crisis reflected this by trying to make the United States more attractive on the international scene in the “race-to-the-bottom” by financial institutions looking to move their activities to jurisdictions with the loosest laws (Chaffee). The pervasiveness of American investments within the global system was seen in the aftermath of the financial crisis as flaws in American mortgage backed securities spread uncertainty and losses around the world, so global regulation of American products definitely needs to be addressed. This becomes an even bigger problem when considering transnational financial institutions like the ones that failed early on in the financial crisis and how to deal with their failure in many different nations simultaneously. One way to end this “race-to-the-bottom” where institutions manipulate their placement to take advantage of relaxed laws would have been to expressly emphasize extraterritorial application of United States financial regulations around the world in the Dodd-Frank Act, but the issue was only addressed briefly regarding Federal securities regulation specifically with yet another “mandate for additional study” (Chaffee). Like many other issues addressed in the Dodd-Frank Act, a framework and instructions are provided for resolution, but it is weaker than necessary to solve the problem at hand.

Going Forward

The effects of the financial crisis of 2008 are still being felt in the United States and around the world, and will not be fully appreciated for many years. In the four years since the crisis, thousands of academics, politicians, pundits, and financial professionals have analyzed available information and reported on what they believe to be the cause of the crisis. The most popular culprits: an unregulated derivatives market, faulty credit rating agencies, ineffective interest rate manipulation policies by the Federal Reserve, and poor mortgage issuing practices all have credible arguments to relieve them of the singular blame for the crisis. The one thing that can be agreed upon however, is that to prevent future crises “there is a clear need to design domestic, regional and international financial architecture to address their causes and consequences” (Arner, and Buckley). But, if there is not yet a consensus as to what triggered the crisis, how can a solution be proposed to prevent reoccurrence that will both be effective and satisfy all stakeholders involved?

It is clear that the inability to identify a single cause has created widespread dissatisfaction with the Obama Administration’s regulatory response in the Dodd-Frank Act, and that the work of overhauling financial regulation is just beginning. A lasting and effective regulatory change can only come about after all those involved accept that no single actor or event triggered the crisis. A multitude of variables over the decades since the Great Depression combined to create an immense bubble in the United States Housing markets which over time became unsustainable and burst suddenly and surprisingly in a way that no one was prepared for.

To prevent an event like this from occurring in the future the global economy needs to completely revise the current international system of financial regulation in order to create one that is uniform, streamlined, and effective at controlling risk while not stifling innovation. The United States is in a unique position with its economic power and as the originator of the crisis to lead the direction of the new global system of financial regulation and reaffirm itself as the dominant world economy during the process. These are lofty goals and not ones that are easily achieved. In recent years, culminating with the financial crisis of 2008, it has become clear that the current regulatory system does not work with current economic realities. Rather than a system based on economic activity occurring within the borders of individual nations, like the one that existed in the aftermath of the Great Depression, today we have a global economic system that "is one of largely open trade, generally floating fiat currencies, global finance and decentralized development support" (Arner, and Buckley). The shift from national to global finance has produced "fundamental changes [that] are well known and have been consistent since the early 1990s: financial and monetary instability resulting in economic crisis" (Arner, and Buckley). The laws in place prior to 2008 did not effectively work with or define this newly developed system, and the world dealt with the consequences. Unfortunately it took an immense crisis for the majority of people to see this reality, but with past experience, modern knowledge, and recent motivation the United States will be able to lead the world in this much needed regulatory reform.

Financial Stability

As learned from the lessons taught by history and the government's response to the Great Depression, the best regulatory solution must have the ability to evolve and adapt to future innovations and products of financial engineering to foster stability in the long term. It is also easy to see from studying the history of financial regulation that the state of world finance changes quickly. Rules that made sense in the 1930's contained in Glass-Steagall no longer made sense in the 1990's and had to be corrected. Programs to promote home ownership in the 1970's worked for a time until things changed and they needed to be revised because they did more harm than good. Laws were passed that were well intentioned and intellectually sound in their times, but they were not flexible enough or broad enough in scope to promote general stability beyond the areas they concerned. It seems that government intervention in the functioning of markets, no matter how well intentioned, tends to have unforeseen damaging consequences years down the road. Within the United States a regulatory scheme that intervenes only when necessary to stop excessive speculation or other activities detrimental to economic stability, yet also allows room for firms to innovate, succeed, and fail on their own will be most effective.

A first step down the road to creating a lasting system of regulation is to define financial stability as something other than the absence of a crisis. In a 2010 article in the Melbourne Journal of International Law, it is defined as:

> The joint stability of the key financial intermediaries operating within the financial system and the stability of the constituent markets. For financial intermediaries, this generally means that they are sound, that is they have sufficient capital to absorb normal, and at times abnormal, losses and sufficient liquidity to manage operations and volatility in normal periods. Market stability generally means the absence of the kind of volatility that could have severe real economic consequences (that is, systemic risk). (Arner, and Buckley)

Considering this definition, the United States is headed in the right direction with Dodd-Frank. The Financial Stability Oversight Council will monitor the success of actions to sustain stability, and increased capital and disclosure requirements called for throughout the Act will be put in place to ensure that individual firms are prepared for unexpected market fluctuations. When considering that a total regulatory overhaul which will operate well into the future of the global system is needed, the calculating and measured mandated study and rule making process outlined in Dodd-Frank begins to seem less like political inefficacy and more like the process of deliberate, lasting, and effective change.

Dodd-Frank outlines efforts over the next several years by the United States government to study the issues and remedy the financial system, but needs specific plans of action to be developed to fill in the gaps it leaves in policy.

Revision of the Existing System

The next step toward an ideal regulatory system after concretely defining the goal of financial stability is eliminating the patchwork of overlapping regulations that exists today. Before 2008 the United States' regulatory structure "for financial institutions [had] remained largely unchanged since the 1930s even though the financial environment has undergone many fundamental changes" (Pellerin, Walter, and Wescott). Piecemeal changes to laws in attempts to keep up with the times have created a system with many internal conflicts and questions of authority. For instance, depending on the type of financial institution in question and its activities, it can be accountable to the Securities and Exchange Commission, the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, the National Credit Union Administration, the Commodity Futures Trading Commission, the Federal Housing Finance Agency, agencies in each state overseeing banking and thrift institutions, and industry self-regulatory organizations (Pellerin, Walter, and Wescott). The patchwork of overlapping and hard to understand regulations and agency authorities cannot effectively regulate the lightning fast, digital communication driven, global financial sector of today's world. Financial conglomerates, defined as "companies providing services in at least two of the primary financial products – banking, securities, and insurance" (Pellerin, Walter, and Wescott), which have been increasingly common since the passage of the Gramm-Leach-Billey Act, further complicate the job of regulation among the several authorities. The overlap in regulatory efforts among different agencies has reduced their individual efficiencies and effectiveness, as well as raised their costs (Pellerin, Walter, and Wescott). Reducing the complexity and number of regulators and regulations would benefit the redesign of financial regulation by making information sharing easier among fewer parties, increasing accountability and transparency, reducing costs, and making it easier for firms to know what they are required to do by law. This problem is amplified outside the United States by the regulations of other nations and terms of international agreements. As Professor Chaffee said in his introduction to the Dayton Law School Symposium on the financial crisis, "the patchwork regulation that currently exists in the world today has generated a race-to-the-bottom, and the cure to prevent or lessen any future financial crisis is for nations to agree to the harmonization and centralization of international securities regulation" (Chaffee).

The confusion and regulatory arbitrage opportunities presented by this overlap produce negative consequences other than just disorder. Unequal regulations on the same activities across nations compel firms to race to the bottom of regulation where they can operate most freely and pay the least amount of taxes. This regulatory manipulation and under-taxation makes areas of the financial sector an overly attractive place to invest, and as explained earlier this can facilitate serious problems such as asset pricing bubbles. A unified set of international tax laws to resolve the issue of unfair under-taxation would limit the unrealistic size and speculation activities of the financial sector that have occurred in recent years. As explained in the Melbourne Journal of International Law:

> We have allowed the financial sectors of some developed nations to grow too large in size and to devote too large a proportion of their activities to casino type speculation rather than the intermediation of capital, which is the core function a financial sector. The globalization of finance has made its taxation more difficult, as capital can so easily migrate to lower tax jurisdictions. And the relative under taxation of financial sectors generally has contributed to their growth. Hedge funds pay very little tax and investment banks pay less than their fair share… If there is a sector of the economy that pays too little tax, resources should logically flow into it. And this is what we have seen over the past 30 years… These savings, that could be being

> put to productive uses, are in large measure going into socially useless and purely speculative trading. (Arner, and Buckley)

This explains the growth of the shadow banking system around the world. It also highlights the fact that necessary and logical fixes made to the rules governing financial institutions, without restricting their activities specifically, will have the effect of providing incentives for financial markets to correct themselves and better allocate funds without direct and more complicated government intervention.

Global Focus

Going back to the parallels between the Great Depression and the financial crisis of 2008 it can be seen that the Depression at the national level in the United States was much like the "Great Recession" of today on the global level. Increased cooperation within the United States led to stability after the Great Depression, and so it follows that "because of the globalization of financial markets that has occurred in the past few decades, coordination and cooperation must become the norm on the international level" (Chaffee) in order to generate a lasting period of stability. Once the hierarchy of jurisdiction has been established among regulatory agencies and the existing laws have been streamlined to be more effective within the United States, a global focus on doing the same within the regulatory regimes of all nations must be established. The United States is a member of many international organizations, and specifically has a platform to lead this effort as a member of the Group of 20 major economies, or G20. This organization "emerged as the new global mechanism in economic and financial matters" (Arner, and Buckley) around the time of the financial crisis, and it met several times in the immediate aftermath to discuss response and reform. It identified its primary objective in reform efforts to avoid future crises by saying that:

> Regulation is first and foremost the responsibility of national regulators who constitute the first line of defense against market instability, however, our financial markets are global in scope, therefore, intensified international cooperation among regulators and strengthening of

> international standards, where necessary, and their consistent implementation is necessary to protect against adverse cross-border, regional, and global developments affecting international financial stability. (Arner, and Buckley)

In recognizing that a "global crisis requires a global solution" (Arner, and Buckley) in addition to national solutions, the G20 has already paved the way for United States regulation to set a global example for reform after it has been enacted with success domestically. However, in keeping with the spirit of Dodd-Frank:

> The emergence of regulatory harmonization and a centralized global regulator is likely to be a slow evolutionary process, rather than an instantaneous revolutionary process. The world's securities regulators have been slowly moving toward internationalization, but more than one financial crisis will likely be required to yield a harmonized and centralized regulatory regime. (Chaffee)

Drafting trade agreements and treaties between various nations that will be perceived by some as a loss of national authority will be a difficult process. Competing parties will not want to lose their own advantages and degrees of national sovereignty, even for the good of all involved. In the interim before a perfect system of international regulation is developed, if one ever is, the next best idea is to develop a global response mechanism so that when crises do occur again in the future for any reason the world has a way to expediently resolve them.

Response Mechanism

Even in a perfect world with a coherent global scheme, a reality of the current world-wide free market system using fiat currencies is that financial crises will happen. There needs to be a mechanism in place to deal with them smoothly and efficiently when they do. One proposed idea is to create and maintain a fund that would act as a pool for bailouts during the next crisis funded by financial institutions themselves instead of the tax payers of nations whose governments issue bailouts. Ideas to generate income for this fund include a financial transactions tax on individual trades, a financial activities tax charged to nations based on a small fraction of their GDP, or a bank levy that requires banks and similar institutions to pay additional tax on top of normal corporate taxes (Arner, and Buckley). Of all of these ideas, a transactions tax seems the most effective. It would be a “very small impost of between 0.006 percent and 0.05 percent which would be levied on all financial transactions globally, generating large amounts of funds to be available to support development and provide liquidity assistance in future financial crises” (Arner, and Buckley). This small tax would also have the added benefit of increasing the efficiency of markets where it is collected by providing a cost deterrent against “excessively speculative and short term transactions” (Arner, and Buckley). In addition to being supported in the Melbourne Journal of International Law, it is supported by expert financiers Warren Buffet and George Soros, and grew from the idea of Nobel Prize winning economist James Tobin (Arner, and Buckley). It is argued that “essentially all that is needed is the agreement of the US and EU, with the addition of China ASEAN+3 and the remaining BRIC countries being useful but not essential” (Arner, and Buckley). This argument again highlights the positioning of the United States as a potential leader in reforming the financial regulatory system globally, and open support of this crisis response mechanism by the United States government as a part of its comprehensive regulatory reform would go a long way toward getting it created.

Conclusion

The ideas presented in this paper just scratch the surface of the vast amount of scholarship and discussion on financial regulation in relation to the financial crisis of 2008 and what should be done in the future to prevent severe crises. By examining the past it can be readily observed that many factors contributed to the legal and economic environment which created the financial crisis in the United States, and this same examination can provide important insight on what works and what does not in responding to a crisis of this scale. The Dodd-Frank Act in the United States represents a step in the right direction to regulatory reform, but does not accomplish everything that needs to be done, and should not be expected to because of the magnitude of the problem to be solved. Much hard work lies ahead for lawmakers in the United States and around the world in creating legislation that will give the world a lasting solution to manage its ever expanding and evolving economy. However, the future looks bright:

> The outlines of the international architecture appear to be emerging: economic policy cooperation and coordination through the Group of 20, though with some role for the UN in the context of development and climate change; liberalization of trade in goods and services through the World Trade Organization… and sustainable development coordination and assistance through the UN and the multilateral development banks. (Arner, and Buckley)

All of this exists today as a result of global cooperation in the aftermath of the financial crisis of 2008 through international organizations and represents solid progress on the global level. Simultaneously as international cooperation progresses, the United States and other individual nations must remember that "importantly, however, the ultimate responsibility for policies to strengthen financial systems lay with the governments and financial authorities in the economies concerned" (Arner, and Buckley).

As the mandated studies and rulemaking stemming from Dodd-Frank unfold the United States will find itself in an increasingly prominent position of knowledge and experience to lead the world through the end of the crisis and in to future prosperity. Global reforms driven by the United States must keep in mind that:

> We need to reclaim those [financial] markets for their real functions, to serve the real economy that provides our livelihoods. This will only happen when there is a strong groundswell of public opinion in favor of a transactions tax or other measures designed to once again get markets trading on fundamentals. (Arner, and Buckley)

A big part of preventing future crises will be to fix the currently broken system of economic regulation and the incentives it creates that fuel the creation of crises. Whatever form the future product of current regulatory overhaul takes, for it to be effective in the long term it must recognize that “a financial sector exists to provide capital, a necessary input into the productive process. Just like telecommunications, electricity and roads, a financial system is an important piece of infrastructure” (Arner, and Buckley). When financial regulation in the United States reflects this sentiment and is able to put the financial sector at work to grow the real economy, the task of repairing the damage from the financial crisis of 2008 will be complete. With a new and improved global financial architecture the world will be better off having endured the Financial Crisis of 2008 which served as a spark to set off the events that led to this fundamental change.

Works Cited

"Economic Crisis and Market Upheavals." *New York Times*. New York Times Company, n.d. Web. 18 Nov 2012. <http://topics.nytimes.com/top/reference/timestopics/subjects/c/credit_crisis /index.html>.

"Making Global Finanace Work for People and the Planet." Civil Society Consultation for the Commission of Experts of the President of the UN General Assembly on Reforms of the International Monetary and Financial System (2009): 1-4. United Nations' Non-Governmental Liason Service. Web. 3 Jan 2013.

Arner, Douglas, and Ross Buckley. "REDESIGNING THE ARCHITECTURE OF THE GLOBAL FINANCIAL SYSTEM." *Melbourne Journal of International Law* 11.185 (2010): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Black, Barbara. " Essays from the University of Dayton School of Law Symposium--The Fall from the Bailout: The Impact of the 2008 Bailout on Lending Regulation, Securities Regulations, and Business Ethics: Introductory Essay: Introductory Essay: Protecting the Retail Investor in an Age of Financial Uncertainty." *University of Dayton Law Review* 35.61 (Fall, 2009): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Chaffee, Eric. "Essays from the University of Dayton School of Law Symposium--The Fall from the Bailout: The Impact of the 2008 Bailouto on Lending Regulation, Securities Regulations, and Business Ethics: Introductory Essay: A Panoramic View of the Financial Crisis that Began in 2008: The Need for Domestic and International Regulatory Reform." *University of Dayton Law Review* 35.61 (Fall, 2009): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Date, Raj, and Michael Konczal. Out of the Shadows Creating a 21st Century Glass-Steagall. 10 p., 25 Feb 2010. Web. 3 Oct. 2012.

Evanoff, Douglas, and William Moeller. "Dodd–Frank: Content, purpose, implementation status, and issues." *Economic Perspectives* 3Q (2012): 75-84. Federal Reserve Bank of Chicago. Web. 3 Jan 2013.

Folsom, Burton. "Comparing the Great Depression to the Great Recession." The Freeman: Foundation for Economic Education. The Foundation for Economic Education, 20 May 2010. Web. 3 Jan 2013. <http://www.fee.org/the_freeman/detail/comparing-the-great-depression-to-the-great-recession#axzz2Gw1saFdU>.

Gary, Alison. "Comment: Creating a Future Economic Crisis: Political Failure and the Loopholes of the Volcker Rule." *Oregon Law Review* 90.1339 (2012): n.pag. *LexisNexis Academic*. Web. 3 Jan 2013.

Greenberger, Michael. "Overwhelming a Financial Regulatory Black Hole with Legislative Sunlight: Dodd-Frank's Attack on Systemic Economic Destabilization Caused by an Unregulated Multi-Trillion Dollar Derivatives Market." *Journal of Business & Technology Law* 6.127 (2010): n.pag. *LexisNexis Academic*. Web. 3 Jan 2013.

Hardaway, Robert. " Essays from the University of Dayton School of Law Symposium--The Fall from the Bailout: The Impact of the 2008 Bailout on Lending Regulation, Securities Regulations, and Business Ethics: Introductory Essay: The Great American Housing Bubble: Re-Examining Cause and Effect." *University of Dayton Law Review* 35.61 (Fall, 2009): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Heppt, Joseph Michael. "An Alternative to Throwing Stones: A Proposal for the Reform of Glass-Steagall." *Brooklyn Law Review* 52.281 (1986): n.pag. *LexisNexis Academic*. Web. 3 Jan 2013.

Komai, Alejandro, and Gary Richardson. "A Brief History of Regulations Regarding Financial Markets in the United States: 1789 to 2009." NBER Working Paper Series Working Paper No. 17443. (2011): n.pag. National Bureau of Economic Research. Web. 18 Nov 2012.

Lipshaw, Jeffrey. " Essays from the University of Dayton School of Law Symposium--The Fall from the

Bailout: The Impact of the 2008 Bailout on Lending Regulation, Securities Regulations, and Business Ethics: Introductory Essay: Disclosure and Judgement." *University of Dayton Law Review* 35.61 (Fall, 2009): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Miller, Robert. " Essays from the University of Dayton School of Law Symposium--The Fall from the Bailout: The Impact of the 2008 Bailout on Lending Regulation, Securities Regulations, and Business Ethics: Introductory Essay: Morals in a Market Bubble." *University of Dayton Law Review* 35.61 (Fall, 2009): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Mitchell, Stacy. "Glass-Steagall Act & the Volcker Rule." Institute for Local Self-Reliance. Institute for Local Self-Reliance, 26 Oct 2010. Web. 18 Nov 2012. <http://www.ilsr.org/rule/glass-steagall-act-the-volcker-rule/>.

Pellerin, Sabrina, John Walter, and Patricia Wescott. "The Consolidation of Financial Regulation: Pros, Cons, and Implications for the United States." *Economic Quarterly*. 95.2 (Spring 2009): 121-160. Web. 6 Feb. 2013.

Pitt, Harvey. " Essays from the University of Dayton School of Law Symposium--The Fall from the Bailout: The Impact of the 2008 Bailout on Lending Regulation, Securities Regulations, and Business Ethics: Introductory Essay: Financial Services Regulatory Reform in the Face of an Economic Meltdown." *University of Dayton Law Review* 35.61 (Fall, 2009): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Prasch, Robert. "The Dodd-Frank Act: Financial Reform or Business as Usual?." *Journal of Economic Issues* 46.2 June 2012. 549-555. *LexisNexis Academic*. Web. 3 Jan 2013.

Ramirez, Steven. " Essays from the University of Dayton School of Law Symposium--The Fall from the Bailout: The Impact of the 2008 Bailout on Lending Regulation, Securities Regulations, and Business Ethics: Introductory Essay: Subprime Bailouts and the Predator State." *University of Dayton Law Review* 35.61 (Fall, 2009): n.pag. *LexisNexis Academic*. Web. 18 Nov. 2012.

Richardson, Matthew. "Regulating Wall Street: The Dodd–Frank Act." *Economic Perspectives* 3Q (2012): 85-97. Federal Reserve Bank of Chicago. Web. 3 Jan 2013.

Wallison, Peter. "Deregulation and the Financial Crisis Another Urban Myth." *American Enterprise Institute*. American Enterprise Institute, 31 Oct 2009. Web. 3 Jan 2013.

Wallison, Peter. "What got us here?" *American Enterprise Institute*. American Enterprise Institute, 9 Dec 2008. Web. 3 Jan 2013.

White, Lawrence. "The Gramm-Leach-Bliley Act of 1999: A Bridge Too Far? Or Not Far Enough?." *Suffolk University Law Review* 43.937 (2010): n.pag. *LexisNexis Academic*. Web. 3 Jan 2013.