Deregulation and The 2007-2008 Housing/Debt Crisis

Analysis of the Housing/Debt Crisis of 2007-2008 and its impact on the Financial Strength and Vulnerability of the United States and Global Economy

Dissertação apresentada à Escola Brasileira de Administração Pública e de Empresas para obtenção do grau de Mestre

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DEDICATION

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GOD IS LOVE
Abstract

One looming question has persisted in the minds of economists the world over in the aftermath of the 2007-2008 American Housing and Debt Crisis: How did it begin and who is responsible for making this happen? Another two-part question is: What measures were implemented to help end the crisis and what changes are being implemented to ensure that it will never happen again? Many speculate that the major contributing factor was the repeal of the Glass-Steagall Act in 1999 that prompted a virtual feeding frenzy among the banking community when new calls from Capitol Hill encouraged home ownership in America as well as the secondary mortgage market which skyrocketed thereafter. The Glass-Steagall Act will be among many of the topics explored in this paper along with the events leading up to the 2007-2008 housing/debt crisis as well as the aftermath.
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AAU - American Asiatic Underwriters
AIG - American International Group
AIGFP - AIG Financial Products
AIU - American International Underwriters
ARM - Adjustable Rate Mortgage
CB0 - Congressional Budget Office
CDO - Collateralized Debt Obligation
CDS - Credit Default Swap
CMO - Collateralized Mortgage Instrument
DIDMCA - Depository Institutions Deregulation and Monetary Control Act
ECB - European Central Bank
Fannie-Mae - Federal National Mortgage Association
FDIC - Federal Deposit Insurance Corporation
FHFA - Federal Housing Finance Agency
Freddie-Mac - Federal Home Loan Mortgage Association
GDP - Gross Domestic Product
GSE - Government-Sponsored Entity
LTV - Loan to Value Ratio
MBS - Mortgage-Backed Security
OTC - Over-the-Counter
QE - Quantitative Easing
RMBS - Residential Mortgage-Backed Security
Chapter One: Conceptual Framework and Literature Review

1.1 Introduction to the Problem

The world in the last century has witnessed rapid growth and prosperity like none witnessed in the history of humankind. Nations have risen from the obscure shadows into formidable powerhouses. Regions that were once viewed as irrelevant and lacking stability overcame massive challenges to emerge into global centers of power. As technological innovation moved forward with alarming speed, the world would soon become integrated in ways that history has never seen. With the evolution of the Internet, social media and various other venues, an individual could reach out to the other side of the globe with the stroke of a key or the click of a mouse.

However, the world has also witnessed economic downturns, regional and national recessions and depressions, with alarming trade and budget deficits, banking crises, massive home foreclosures and financial instability of untold proportions. At the core of these ups and downs, one factor has stood as the key ingredient to the prosperity of local communities, state/provincial governments, federal government, or the global arena; proper legislation that ensures fair and equitable contractual agreements and integrity within the institutions. The Glass-Steagall Act was a key component in separating banking and securities in order to ensure proper administration of banking regulation in America. However, after its repeal, things appeared (on the surface) to go really well and then eventually take a turn for the worse in America.

In 2007, a housing market crash in the United States became a huge wake-up call to legislators who called for legislation that would lead to Americans achieving the ultimate American dream; that dream being home ownership. As the actions of politicians on Capitol Hill sent ripples
across America, American citizens who, previously would not be able to fathom owning a home, soon faced the seemingly impossible opportunity to finally purchase their American dream. Among these ranks were those who knew that they probably could not afford the mortgage payments that would inevitably become due. As time passed and the housing bubble began to burst, these same homeowners found themselves over their heads and began defaulting on their mortgage payments which led to foreclosure. Soon, whole communities would be affected as the foreclosure debacle began to affect the entire housing market.

The implications of this housing crash would begin to drive housing prices spiraling downward in rapid fashion. Soon, even the most financially astute, solvent homeowners faced with being underwater with their mortgages faced with no choice but to default and allow the banks to take the property since they could not refinance or sell without taking a loss. This unfortunate situation would eventually find its way to the doorsteps of mortgage originators and investors who, at the behest of Capitol Hill, loosened their practices in order to capitalize on the opportunity to rake in profits never before seen based upon promises made by Washington D.C..

As credit and mortgage loans became increasingly easier to obtain, housing prices began to skyrocket as people lined up to obtain a loan. Some borrowers held the idea of finally being able to purchase their dream home; others saw it as an investment opportunity and way to possibly make a solid return on investment by buying a home and tapping into the equity as prices continued to rise. But as the housing bubble burst and credit tightened, these same Americans could not sell the property or refinance into another loan and were left holding the keys to a property that was worth less than the mortgage obligation that they agreed to.

At the onset of the housing boom and on the heels of the 2001 recession, legislators thought it a great idea to help get the U.S. economy back flowing through the American housing market by loosening oversight and lending standards. Soon, banks were offering such incentives as interest-only loans and zero down-payment loans to potential borrowers. With 0% down needed to buy
new homes and increasingly loosed lending standards, the home buying turned into a feeding frenzy. However, with the repeal of Glass-Steagall in 1999 which prevented banking and securities brokering under the same umbrella, banks would quickly originate a loan, securitize the loan, bundle hundreds, if not more, of these securities and pass the risk off to someone else by creating allegedly questionable securities against the original mortgage agreement (oftentimes under the disguise of a safe investment that will generate lucrative returns), thereby clearing their books from potentially toxic assets but making a handsome profit in the process.

Ratings agencies would often assign AAA ratings on these questionable securities that made them highly desirable to both domestic and foreign investors as well as pension funds and other institutions. The situation was further fueled by the creation of the derivatives market that was used to capture more profit based upon the profit-creation model that had been implemented. The total amount of derivatives held by the financial institutions exploded and, before long, the derivatives market operated in the trillions. In large areas of California and Florida there were multiple years of prices going up 20 percent per year. Some markets like Las Vegas saw the housing market climb up 40 percent in just one year. In California, over half of the new loans were interest only or negative-amortization. From 2003 to 2007 the amount of subprime loans had increased a whopping 292 percent from 332 billion to 1.3 trillion. The housing market reached its peak in 2006. At that time some of the sub-prime loans started to go into default. One year later, the credit markets froze and things began to deteriorate rapidly. Subprime credit stopped completely and interest rates on credit for other types of borrowing including corporate loans as well as consumer loans rose dramatically. The following time-line of events was taken from the article “The Housing Market Crash of 2007 and What Caused the Crash” (Degace, 2011):

**2007**

**February:** Freddie Mac announced that they were no longer buying the most risky subprime.

**April:** Subprime lender New Century Financial Corporation files for bankruptcy.

**June:** Bear Stearns announced a loan of 3.2 billion dollars to help bailout one of its funds that
invested in Collateralized Debt Obligations (CDOs).

**July:** The stock market hit a new high over 14,000. On July 31, Bear Stearns liquidates two of its mortgage-back security hedge funds.

**August:** A worldwide credit crunch had begun and there were no subprime loans available. Subprime lender American Home Mortgage files for bankruptcy. This marked the start of the housing market crash.

**September:** The Libor rate rose to its highest level since December of 1998, at 6.8%.

**December:** The stock market finishes the year at 13,264.

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**2008**

**January 11:** Bank of America acquired Countrywide financial for 4.1 billion dollars. Countrywide had a total of 1.5 trillion dollars worth of loans.

**March 16:** Bear Stearns, on the verge of bankruptcy, signs a merger agreement with J.P. Morgan to sell itself for $2 a share which was fraction of the current trading price.

**May 19:** The markets had its final day above 13,000 closing at 13028.

**September 6:** The treasury announced a takeover of both Fannie Mae and Freddie Mac that had over 5 trillion dollars in mortgages.

**September 14:** Bank of America signs a deal to acquire Merrill Lynch.

**September 15:** Lehman Brothers files for bankruptcy. The Dow drops 400 points closing at 10,917.

**September 17:** The Federal Reserve lends $85 billion dollars to American International Group (AIG).

**September 18:** Fed Chairman Ben Bernanke and Treasury Secretary meet with congress to propose a $700 billion dollar bailout. Bernanke tells congress “If we don’t do this, we may not have an economy on Monday.”
**September 26:** Federal regulators seize Washington Mutual and then strike a deal to sell most of the company to J.P. Morgan for 1.9 billion dollars. This represents the largest bank failure in U.S. history.

**September 29:** Congress votes down the $700 billion bailout plan. That same day Citigroup acquires Wachovia.

**October 1:** The Senate passes the $700 billion bailout bill.

**October 3:** The house passes the $700 billion bailout plan and the president signs it into law.

**October 6:** The fed announces that it will provide $900 billion in short-term loans to banks. The Dow closes below 10,000.

**October 7:** The fed announced that it will lend around 1.3 trillion dollars directly to companies outside the banking sector.

**October 10:** The Dow closes at 8451; the stock market had its worst week ever, losing 22% over the past 8 trading days or 8.4 trillion dollars from the market highs in 2007.

**October 14:** The Treasury taps $250 billion of the bailout fund and uses the money to shore up the nations top banks.

**December 31:** There were over 3 million foreclosures by year's end. Florida, Arizona and California had rates of 4% with Nevada at 7.3%.

The housing crash was considered the worst in U.S. History and became the prime cause for the overall financial crisis. This event would almost cause the economy of the United States to spiral downward into depths not seen since the Great Depression. The crisis would eventually affect nearly everything within the American financial sector with disastrous consequences.

The current debt load of the United States of $17 Trillion (and rising) and the woes and concerns that accompany are but a highlight of the condition of the entire world as the United States is

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considered the premier powerhouse on the planet, both economically and militarily. The Great Depres- sion of the 1930's and, more recently, debt crisis of 2007-2008 proved to show the world that even its mightiest can be fallible and vulnerable to misdeeds, misgivings and mistakes in its thinking of how to view and approach the debt obligations, managing risk as well as decision-making and the irreparable damage caused on a macroeconomic scale that can impact the stability of a nation.

A recent article, titled "The United States' Debt Crisis: Far from Solved" (Mercatus Center, George Mason University, Aug 21, 2014), stated the following:

"The recent decline in federal deficits should not create a false sense that the national debt is no longer a clear and present threat. While this improvement may be encouraging, it represents only a temporary respite from the government's growing fiscal imbalances. Congressional Budget Office (CBO) estimates show deficits growing again two years from now, returning to trillion-dollar levels within a decade, and worsening from there...Deficits and debt are merely symptoms; the disease is overspending, and only by curing it can Washington correct the phenomenal fiscal imbalance the government faces now and in the future. No level of taxes can close this gap over the long term, and higher taxes would exacerbate the deficit and debt problem by acting as a drag on growth. The deficits caused by overspending are already impeding growth. For the past several years, following substantial fiscal and monetary stimulus measures, forecasters have predicted a return to normal rates of GDP growth, but these conditions have not materialized. Further, recent job gains mask nagging underlying problems in the employment market, including a historically low labor force participation rate and a chronically high number of long-term unemployed."

Economists such as Gerald Celente, Catherine Austin Fitts, Max Keiser and others tend to express the concern that the U.S. Dollar is in serious trouble and on the verge of collapse due to gross mismanagement of national debt as well as an economy that is unsustainable due to events such as the American housing and subsequent debt crisis. Others seem to have a different view on the subject matter. But all parties appear to have one important element in common; they all believe that if the U.S. Dollar fails then the currencies of the rest of the world whose currencies are tied to the U.S. Dollar may fall like dominoes, thereby creating a tornado of immense proportions while causing widespread economic catastrophe, affecting nearly everything in its path.

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2. Mercatus Center, George Mason University, Aug 21, 2014
Likewise, the European Union is faced with the same potentially disastrous circumstances. The Euro came into creation back in 1999. This new currency would serve to unite the economies of approximately 18 countries. This was in an effort to smooth international trade after years of obstacles, including trade tariffs and trade barriers and, in some cases, higher interest for borrowing. This would virtually combine most of Western Europe under one financial umbrella. Under this new agreement, all countries were able to obtain credit and borrow money in order to fund government, provide social benefits and other expenditures. Under a strong, well-managed infrastructure, this would be ideal, assuming countries properly repay their debts as they became due.

However, within a decade of the introduction of the Euro, the EU found that it was faced with a huge dilemma. The Monetary Policy vs the Fiscal Policy was at the heart of the controversy. Countries like Germany proved to be very conservative and responsible in its spending and managing its fiscal policy as well as having a healthy economy where its citizens paid taxes, thereby ensuring that Germany would remain solvent and not go into default, thereby risking a reduction in its credit rating which could lead to higher interest rates on its future borrowing. In contrast, countries like Greece, Portugal and Spain typically tended to maintain a more liberal fiscal policy, spending countless euro that it borrowed from the ECB on social programs, retirements, job creation, etc. These countries would go on to accumulate massive debts with no clear and decisive way to effect proper and timely repayment. In comparative analysis, the Housing and Debt crisis would ultimately serve as an obvious negative punctuation to the financial stability of the global banking and investments markets which many believe are due to the deregulation of important pieces of American legislation that were put in place to preserve and protect the stability of one major segment of the American financial market.

In the aftermath of some of the most profoundly shattering events in financial markets around the world, this paper is written to examine what many believe to be the major contributing factors. This paper shall shed light on and analyze the repeal of Glass-Steagall as well as the events
leading up to and surrounding the United States Housing Crisis and the ultimate Financial Crisis of 2007-2008, the implications of their occurrence, a snapshot of who and/or what was negatively affected due to the event and how the situation was dealt with so as to provide the reader with a clear understanding and example of how legislation and politics affects regional and global commerce and the way nations around the world deal with their own individual strengths and systemic vulnerabilities.

1.2 Research Objective and Hypothesis
This paper seeks to examine landmark decisions such as the repeal of Glass-Steagall and their implications on the 2007-2008 housing and debt crisis as well as a series of actions and events that would eventually shake the American economy to the core. The American Housing Bubble, Housing Crisis and ultimate Financial Crisis will be explored. The very nature of individual, regional and, ultimately, global commerce and contractual obligations in the modern world have been heavily influenced by governmental legislation and regulation; and other times, deregulation. At its best, it serves to protect the individual person, corporation or governmental body from the fierce claws of commercial dishonor and allow for fair execution of commerce and the contractual relationships contained therein. At its worst, it can impede the potential as well as real performance of the free market in many sectors and tends to stagnate growth on many levels. Lastly, it can help give rise to financial calamities of epic proportions that can have disastrous consequences.

In theory, government is formed and functions to serve the people within its respective jurisdiction. However, as the nations of the world continue to bring themselves into the throws of being more interwoven through political partnerships and the like such as the Trans-Pacific Partnership, interdependence may prove to be a heavy burden at both the highest and lowest ends of the spectrum of global commerce. This is clearly indicated in the fact that multiple foreign investors, both big and small, bought into the mortgage securitization giant that was created and ultimately fell apart with some losing billions of dollars in the process, if not more. A snapshot of
the historical mistakes of the past may give us a clearer perspective of what to expect and possibly change in the future in regards to the individual as well as the collective well-being and prosperity for humankind on the planet.

The most prevailing question however stands; did the repeal of the Glass-Steagall Act of 1933 help usher the way for the 2007-2008 Housing and Debt Crisis?

1.3 Sources of Data and Definition of Variables
Sources of information gathered include excerpts from interviews and reports from economists, research papers, news reports, Internet and other sources of information. Further, this paper consists of several case studies that delve into particular areas of different contributing factors that helped lead to the housing and debt crises. And finally, a poll is conducted by the author. This survey is conducted in person.

1.4 Review of Literature
The events that followed the repeal of the Glass-Steagall Act were predicted by several top economic analysts who wrote extensive literature that addressed the common concern of the impact that a housing crash would have on the American economy and the global market alike. Their warnings were largely ignored by Capitol Hill as well as bankers and mortgage originators who were eager to rake in massive profits by either earning commissions or holding the debt obligations on their books in order to tap into massive periodic interest payments.

Likewise, considerable literature was written to analyze and examine the infrastructure of the modern mortgage establishment in the wake of the repeal of Glass-Steagall. Their analyses shed light on the inner-workings of the mortgage from closing on the home to reassigning secured interest on the secondary and/or tertiary market(s). While most argued that the market was intact and great for the economy, these several economists steadfastly insisted that a housing bubble had been created and an inevitable crash would soon occur. Their warnings went largely unheeded and the housing and subsequent debt crisis followed. Several of these economists are
highlighted in this paper to show their extensive contributions in an effort to help stave off the crash that occurred. Dean Baker, Med Jones, and Peter Schiff will be the focus of discussion in the paper alongside their findings.

Finally, this paper will shed light on the viewpoint posed by economist and professor C.A.E. Goodhart including the notion that overregulation, not deregulation, caused the housing crash and financial crisis. His research and conclusion postulates that it was actually overregulation that helped pave the way to the financial disaster by Federal Reserve policies that maintained low interest rates and high liquidity. Included in this paper will be excerpts from a working paper from the University of Chicago Law School, written by Kenneth W. Dam.

1.5 Methodology and Results
The primary research methodology utilized in the gathering of data in this presentation is qualitative, such as to identify and name specific components of the subject matter. These components consist of such aspects as analyses of legislation such as the Glass-Steagall Act, the overall structure of the mortgage industry in America, warnings from several economists and, finally, case studies that spotlight several of the many institutions that contributed to the massive downturn of the American economy. Through the use of charts and graphs (included in the List of Figures), this paper aims to show the correlation between the repeal of Glass-Steagall and the surge in mortgage originations in its aftermath. Likewise, quantitative method will be employed to further show the relationship between mortgage originations, securitization of debt instruments that spun off from the mortgage originations, the massive rise in home prices and, finally, the negative effects of the overall market once subprime loans began to go into default.

This information should give a thorough understanding of the main factors that created the boom and bust that America experienced in the aftermath of the repeal of Glass-Steagall. Further, as previously mentioned, a survey of a sample of the American population (as to their awareness of Glass-Steagall) will be analyzed in order to arrive at a conclusion as to whether the awareness of
legislation (or lack thereof) amongst the general population contributes to systemic actions on the part institutions in order to increase their bottom line. Finally, the research seeks to examine and address whether or not regional/global financial strengths and vulnerabilities are simply coincidence or a result of other factors, such as excessive government intervention or, in contrast, insufficient government regulation on activities that may have lead to the event.

1.6 Discussion and Conclusions
The major points of discussion in this paper will be the mortgage industry in America as well as various methods in which the banking community used financial innovations in lieu of mortgages to increase market share and make record profits in the aftermath of the repeal of Glass-Steagall. Likewise, this paper examines some of those innovations and the potentially dangerous effects on the United States economy leading up to (and in the aftermath of) the housing and debt crisis. The mortgage crisis of 2007-2008 shall be explored in-depth as well as its shattering effects on homeowners, lenders, the secondary markets as well as tertiary markets. An analysis of such entities as Fannie-Mae and Freddy-Mac as well as key figures in government and their actions and implementations in the loosening of mortgage lending practices and protocols shall be explored and laid out in the paper so as to show a reasonable cause and effect snapshot in the mortgage crisis. Further, the paper will address the initiatives in government and the Federal Reserve in dealing with the crisis. The modification of Federal Reserve policies will be explored as the crisis escalated, leading to the implementation of what is known as Quantitative Easing (QE). In this area, the paper shall focus on the short-term fixes as well as the potential long-term consequences of QE.

1.6 References
See Sources
Chapter Two: Overview of Financial Instruments

2.1 The Mortgage Loan Process

In examining the main subject matter of this paper, it is a crucial first step to explain the initial process that is the basic premise for the issuance and use of differing classes of financial instruments in the mortgage industry. Therefore, we shall first discuss the way in which a mortgage origination takes place and then discuss the legislation that changed the nature of the mortgage industry as well as the impacting ways in which innovative strategies created by lenders helped to create one of the worst housing crisis in U.S. history.

Historically, the mortgage institution has been one that was regarded as very straight-forward and largely responsible for enabling the purchase of homes by Americans who, otherwise would not have the wherewithal to afford to fund the purchase entirely by themselves. The mortgage industry was regarded as a critical avenue in stimulating the stagnant economy of the United States in the aftermath of the 2001 economic slowdown. The US economy needed a means to promote economic growth and, at the least, retain stability. But a closer look at the practices of lenders in providing loans to the potential homeowners show that lending practices may have been questionable and at someone else's expense. As lenders were looking to rake in record profits from the origination and funding of various types of mortgages in the aftermath of the repeal of Glass-Steagall, they may have been a significant factor in the creation of the housing bubble and the subsequent effects that followed the 2007 housing crisis. But they may not have been the only culprits. Unscrupulous borrowers who presented inaccurate details concerning their financial solvency in regards to the mortgage agreement may have been another major player in the fiasco that ensued.
The mortgage loan process involves first a seller who is looking for a buyer for his or her home or property. Next, a potential buyer who is interested in the subject property applies for a loan through a financial institution that specializes in providing mortgage loans. The loans are typically determined based upon certain criteria such as annual income, FICO score (credit rating of the potential borrower), current debt to income ratio of the potential borrower, loan to value (LTV) of subject property and other factors. If all variables are in the right alignment, a loan has been approved. The financial institution then begins to monetize the transaction by providing the credit line that pays off the seller and seals the deal. The financial institution then creates a stack of paperwork for the borrower to sign at closing. This includes a promissory note, deed of trust and other formal documents that precede the funding of the transaction. Once these documents are completed and the closing is successful, usually within 72 hours or up to one week, depending on the circumstantial variables of the transaction, the borrower is then able to move in and occupy the property. Figure 1.1 illustrates the massive surge in mortgage originations in the aftermath of the repeal of Glass-Steagall and leading up to the 2007-2008 housing and debt crisis.
Subprime Mortgage Originations

(1994 - 2006)

Figure 1.1 (Source: Credit Suisse, Hammond Associates Intl Find Consultants, Investopedia.com)
2.2 Securitization and Derivatives

Securitization of a mortgage occurs when a mortgage loan is originated by an institution and the secured interest is sold to a third party, usually an investor or other institution in exchange for the funding for the loan as well as the origination fee for the mortgage originator. In the early days of mortgage lending, a Savings or Loans Institution would issue a loan and hold it on their books until maturity. If the borrower eventually defaulted on the loan then the bank would have to take a loss on the mortgage agreement. This factor of risk compelled the lending institution to carefully screen its potential borrowers, thereby ensuring only the most qualified borrowers were given loans. However, as time passed and intact legislation that protected the integrity of the mortgage process began to be peeled away, institutions were given adequate room politically to leverage new and innovative ways to increase their profit margins and bolster their books. As mentioned previously, one way was to originate the loan and then sell the secured interest to a third party. This would also serve to pass some of the credit risk off to the third party as they would be promised a generous return on investment. The originating lender thus had less concern as to whether the loan was defaulted on and was driven by the payment earned for originating the loan and selling it off onto the market.

2.2.1 The Securitization Process

Securitization is the aggregation and pooling of assets with similar characteristics in such a way that investors may purchase interests or securities backed by those assets. Securitization of mortgages began in the 1970s, and sub-prime securities became available in the 1990s. Wall Street pooled $508 billion worth of sub-prime mortgages in 2005, up from $56 billion in 2000. Pools of mortgages are split into a number of different tranches whose characteristics are compared with historical data to predict the credit risk of the tranche. The tranches each have a different grade, listed in order from senior, to mezzanine (or medium), to junior. The senior tranche is paid off first and has the highest investment grade, and the most junior tranche is the most likely to be impacted by default. The most junior tranche is usually held by the originator, exposing them to the most risk, while mortgage-backed securities held by investors are normally
highly-rated bonds.

2.2.2 Credit Derivatives

A Derivative is defined as a contract that derives its value from the performance of an underlying entity. The underlying entity can be as asset, index, or interest rate, and is often called an “underlying”.

Derivatives can be used for a multitude of purposes such as insuring against price movements (normally referred to as hedging) or increasing exposure to price movements for speculation or getting access to otherwise difficult-to-trade assets or markets. Forwards, futures, options, swaps all fall under this category. Likewise, collateralized debt obligations and credit default swaps are considered to be variations of the derivatives category. Most derivatives are traded over-the-counter or off-exchange in private venues or on an exchange such as the Chicago Mercantile Exchange. Derivatives are one of the main categories of financial instruments with the other two being stocks (such as equities or shares) and debt (such as bonds and mortgages).

Investopedia.com defines Credit Derivatives as follows:

“Privately held negotiable bilateral contracts that allow users to manage their exposure to credit risk. Credit derivatives are financial assets like forward contracts, swaps, and options for which the price is driven by the credit risk of the economic agents (private investors or governments).”

Investopedia.com further gives a brief explanation as follows:

“For example, a bank concerned that one of its customers may not be able to repay a loan can protect itself against loss by transferring the credit risk to another party while keeping the loan on its books.”

While the root cause of the financial crisis is assumed to be based upon the fact that the residential real estate asset price bubble eventually burst, it is noted by many experts that the underlining systemic risk lies in Over the Counter Derivatives (or OTC derivatives). OTC derivatives can serve a straightforward role as financial insurance policies covering real business

3 http://www.investopedia.com/terms/c/creditderivative.asp
risks. For example, in a hedging scenario an investor that has exposure to a variable interest rate can transfer the risk to a second investor (a counter-party) by entering into an interest rate swap. A swap is simply an agreement to exchange cash-flows.

2.2.3 Residential Mortgage-backed Securities
A Residential Mortgage-backed Security (or RMBS) is defined as a type of asset-backed security that is secured by a mortgage or collection of mortgages. These instruments are offered in the investments arena often as a steady stream of revenue to potential investors in order to raise capital in which to fund the mortgage transaction, since the banks do not actually lend money from their books. When an entity or individual invests in an MBS they are, in essence, lending money to the home buyer or business. In this case, the bank that initializes the mortgage acts as a middleman between the home buyer and the investment markets. The initiating bank will sell the security on the open market or over the counter once the purchase agreement of the home has been finalized. And once this takes place then the instrument acts much like a Coupon Bond in which investors receive installment payments of interest in addition to the repayment of their initial principle. Typical characteristics of an MBS are as follows:

1) It originates from a regulated and authorized financial institution;
2) It is grouped in one of the top two ratings as determined by an accredited credit rating agency;
3) It usually involves paying periodic payments that are similar to coupon payments (such as Coupon Bonds)\[4\]

2.2.4 Collateralized Debt/Mortgage Obligations
Collateralized Debt/Mortgage Obligations (CDOs/CMOs) are tranched claims that form their basis on the existence of a pool of bonds or assets (which is evidence of an existence of a debt/mortgage obligation).\[5\] Mortgage-backed securities fall under this category since the individual mortgage agreement is bundled into a pool of other mortgages and sold out onto the

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\[4\] http://www.investopedia.com/terms/r/rmbs.asp
\[5\] http://www.investopedia.com/video/play/primer-collateralized-debt-obligation-cdos/
market to investors and institutions to be held on their books or to pass off to other investors or institutions. Another aspect of this type of arrangement worth noting is the use of Credit Default Swaps (CDSs). A CDS is defined as a swap contract that pays off a claim in the event of a default on any mortgage loan in the portfolio of the mortgage-backed security. It is essentially an insurance plan that, in theory, is supposed to protect the integrity of the portfolio as a whole. The size and scale of the market for CDOs is quite enormous. By the end of 2007, the size of the CDO market was estimated to be around US $500 billion and the notional principle of the CDS market was estimated to be around US $60 trillion. Figure 1.2 illustrates the enormous increase in CDO issuances in the aftermath of the repeal of Glass-Steagall and leading up to the 2007-2008 housing and debt crisis.

6 http://www.investopedia.com/video/play/credit-default-swaps/
CDOs Issuance From 1997 to 2007

Figure 1.2 (Source: Hammond Associates, Investopedia.com)
Chapter Three: Overview of the United States Debt Crisis

3.1 Repeal of Glass-Steagall

"The shapers of the American mortgage finance system hoped to achieve the security of government ownership, the integrity of local banking and the ingenuity of Wall Street. Instead they got the ingenuity of government, the security of local banking and the integrity of Wall Street."

- David Frum (columnist and former speechwriter for President George W. Bush), National Post, July 11, 2008.

It has been said by numerous economists that the financial crisis may not have ever happened at all if it were not for the repeal of the Glass-Steagall Act which separated commercial and investment banking for over seven decades. In discussing the subject of this compelling law that helped to protect the integrity of the American banking system, it is of utmost importance to first go through the history of Glass-Steagall and its significance in the American Economy.

After a market downturn and eventual depression of 1920-21, the United States moved into a period of economic prosperity known as the Roaring Twenties. In the aftermath of financial disaster caused by exploded markets and severe financial depravity that affected the lives of countless Americans, from bank CEOs on Wall Street to farmers out in the Midwest, America's economy was reset and prosperity began to flow once again into the country. Industries such as the automobile industry, radio and refrigeration took off with a fever pitch and, once again, the typical working class American had a job to go to during the day and a home to rest his head at night. It was a time of great innovation, especially in the consumer goods industry. This new rejuvenation of the American economy also brought with it new forms of consumer credit and expansion of banking. National City Bank (forerunner of Citibank) and Chase Bank opened offices to sell securities side-by-side with the traditional banking products such as deposits and loans. As the decade progressed, the stock market boomed and eventually reached a bubble.
Along with the bubble came market manipulation in the form of organized pools that would increase the price of stocks and sell them to unsuspecting investors just before the stock would collapse. Banks joined in by offering stocks of holding companies that were purportedly leveraged pyramid schemes and other securities backed by unclear, dubious assets.

In 1929, the market came crashing down and the Great Depression began. It took eight years from the start of the boom to the bust. Later investigations into the causes of the crash revealed the extent of the fraud that preceded the crash. In 1933, Congress passed the Glass-Steagall Act. Under the new regulations, banks were allowed to take deposits and make loans and brokers would be allowed to underwrite and sell securities. But no firm could do both as it would pose a major conflict of interest and risks to insured deposits. The law worked exactly as intended and protected the stability and integrity of the American banking system for nearly seven decades.

Fast-forward to the year 1999 when Democrats led by then-President Bill Clinton and Republicans led by Senator Phil Gramm joined forces to repeal Glass-Steagall at the urging of big banks. What happened over the next eight years was an almost exact replay of the Roaring Twenties. Once again, banks were permitted to originate apparently questionable (or in some cases, fraudulent) loans and sold them to investors in the form of securities. The bubble eventually peaked in 2006 and subsequently began to collapse in 2007. Once again, America found itself in the same conditions as generations before. The credit crunch led to a massive downturn in home buying, which ultimately led to a serious decline in the valuation of the American housing market as supply largely began to exceed demand. As foreclosures spiked with many homeowners who obtained loans they could not afford, a further devaluation would occur as foreclosed homes lowered the value of homes in whole communities. This would then spill over into the books of the investors who were left holding the securities as they would eventually suffer massive losses on their books.
3.1.1 Deregulation and the Boiling Pot

The paper titled "The Law and Economics of Subprime Lending" cited the following:

"...The sub-prime mortgage market became a significant growth segment of the mortgage market in the 1990s. Prior to the expansion of the sub-prime market, borrowers unable to acquire prime-rated financing were often unable to acquire any mortgage financing. Two federal laws that allowed lenders to adopt risk-based standards in their mortgages laid the foundation for the eventual development of the sub-prime mortgage market by leading to the deregulation of interest rates. In 1980, the Depository Institutions Deregulation and Monetary Control Act preempted state interest caps and allowed lenders to charge higher interest rates. And in 1982, the Alternative Mortgage Transaction Parity Act allowed lenders to offer adjustable-rate mortgages and balloon payments. Then, the tax Reform Act of 1986 made interest payments deductible on mortgages and home equity loans, but not consumer loans. This change to the tax code made mortgage debt more attractive than other forms of consumer debt, thereby increasing demand for homeownership and refinancing mortgages but also for homeowners to borrow against the wealth in their homes through home equity loans or refinancing. In 1997 the taxation of capital gains was changed to permit homeowners to take up to $500,000.00 from the sale of a house tax-free, which further encouraged over-investment in residential real estate and price inflation.

The deregulation of lending terms and more accurate risk-based pricing by lenders enabled the development of a more efficient lending market. Prior to the expansion of subprime mortgages, the mortgage market looked little different from the system established during the New Deal whereas most mortgage lending was conducted by local banks and savings and loans paying low rates of interest on deposit accounts and lending out on thirty-year fixed rate mortgages at a slightly higher rate. With lenders restricted from charging higher interest rates, borrowers had to have a good credit history to be approved for a loan. This led to credit rationing and tended to squeeze riskier borrowers out of the market..."

But under the new order of deregulations, the traditional method of securing a mortgage loan became blurred. The new method of securing a mortgage loan under a subprime loan became increasingly popular as both the borrower and the mortgage originator had more leverage and

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less risk. If the risky borrower was willing to pay a higher interest rate later and usually had to put no money down or agreed to some of the other attractive terms such as interest-only or balloon payments, then they were willing to take the risk and take advantage of the rise in housing prices. On the other hand, if the mortgage originator could close the transaction and pass the security off to someone else then they could collect the handsome fee and negate the risk of carrying the security on their books until full maturity and a possible default. The growth of mortgage securitization was a major factor in the growth of the subprime market.

3.1.2 Removing Interest Rate Caps

The Depository Institutions Deregulation and Monetary Control Act (abbreviated as the DIDMCA), enacted on March 31, 1980 by president Jimmy Carter, gave the Federal Reserve greater control over non-member banks. The following is a list of requirements that accompanied the DIDMCA Act:

1) It forced all banks to abide by the Federal Reserve rules;
2) It allowed banks to merge;
3) It removed the power of the Federal Reserve Board under the Glass-Steagall Act to use Regulation Q to set maximum interest rates for any deposit accounts other than demand deposit accounts (with a six-year phase-out);
4) It allowed Negotiable Order of Withdrawal accounts to be offered nationwide;
5) It raised the deposit insurance of US banks and credit unions from $40,000.00 to $100,000.00;
6) It allowed credit unions and savings and loans institutions to offer checkable deposits;
7) It allowed institutions to charge any loan interest rates they chose;
8) It required that banks be charged Fed Float for use of funds received before clearing between depository institutions.
3.1.3 Laissez-faire Regulations

The term Laissez-faire is a concept created by the economic theories of Adam Smith, the 18th-century Scot whose writings greatly influenced the evolution and growth of American capitalism. Smith believed that private interests should have free rein. In his philosophical ideology, as long as the markets were free and competitive, the actions of private individuals, motivated by self-interest, would work together for the greater good of society. However, Adam Smith did favor some forms of government intervention, mainly to establish rules for free enterprise.

Government regulation of private industry can be divided into two categories—economic regulation and social regulation. Economic regulation seeks primarily to control fair pricing and is, in theory, designed to protect consumers and certain companies from the powerful grips of big corporations. It is seen as justified on the grounds that fully competitive market conditions do not always exist and therefore cannot provide such protections themselves. But, as witnessed in the aftermath of the 2007-2008 housing and debt crisis, America witnessed the pendulum swing back and forth, beginning with the Bailout Plan that has cost the American taxpayers in excess of $700 billion in order to save the very same banks that helped create the housing bubble and the subsequent burst as well as the ensuing crisis. American history has seen the same pendulum swing repeatedly between laissez-faire principles and demands for government regulation. For the last 25 years, both liberals and conservatives have sought to reduce or eliminate some categories of economic regulation. Instances such as the repeal of Glass-Steagall illustrate a clear and precise snapshot of government intervention that theoretically and in actuality led to disastrous consequences.

Following the encouragement and legislation of Washington D.C.'s Capitol Hill (in an effort to revive a relatively stagnant American Economy), the banks began a massive campaign of lending to the masses, oftentimes taking shortcuts in order to take advantage of the massive potential profits from originating a mortgage loan and passing it off to an investor or other banking institution. With this new opportunity to capitalize on loosened regulations, the banks generated
tremendous profits. And these profits came with minimum risk as the debt was usually passed off to another.

3.1.4 Inflating the Bubble

The financial crisis that has wreaked havoc in the U.S. And abroad since 2007 began with an asset bubble that coincided with new kinds of financial innovations that allegedly masked the corresponding risk. Companies began failing to follow their own risk management procedures. Likewise, regulators and overseers failed to restrain excessive risk taking. A housing bubble formed all across America as home prices steadily rose each year from the mid 1990s to 2006, oftentimes disregarding such fundamental components as household income. Similar to traditional asset price bubbles, expectations of future price increases became the driving factor in the mortgage transaction and became another significant factor in the rise of home prices. As homeowners across the country witnessed prices in their neighborhood rise, they began to expect those prices to continue rising, even in the late years of the housing bubble when it was nearly at its peak.

The rapid rise of subprime lending helped to inflate the price bubble substantially. Before 2000, subprime loans were a rarity in the mortgage industry, but soon thereafter, it took off exponentially. Lenders would create new innovations in lending such as ARMs (Adjustable Rate Mortgages) with low teaser rates, no down-payments, and other types of new incentives in order to lure potential borrowers to the signing table. These new innovations were predicated on the expectation that home prices would continually rise and generate more equity.

As mentioned, these loans would ultimately be sold off in bundles, often with assets that were actually a safe investment, to investors and other institutions who would hold them on their books. But, the masking of risk would prove to be a pernicious decision; inflicting these same investors with massive damage to their overall valuation of their books when the housing bubble burst. Figure 2.1 illustrates home prices in the aftermath of the repeal of Glass-Steagall.
Annual Change in the Price of Existing Homes (1987-2008)

Figure 2.1 (Source: http://www.standardpoors.com, S&P Case-Schiller Housing Price Index)
3.1.5 Signs and Warnings From Top Economists

Prior to the Housing and debt crisis, several economists and analysts gave dire warnings about the inevitability of a housing bubble that was expected to burst (based upon their research). Most were ridiculed by other economists and the public at large. This section of the paper will showcase several individuals who predicted the housing and debt crisis well before it happened:

**Med Jones**

Med Jones is the president of International Institute of Management (IIM); a U.S. Based research and education organization. In his seminal research paper, "US Economic Risks and Strategies 2007-2017", he warned about the housing bubble, the subprime mortgages and the rising national debt. In January, 2007, he challenged the President's State of the Union Address, the Federal Reserve Chairman and the popular opinion of the mainstream economists. In a Reuters interview in March of 2007, he warned about the loss of confidence in the U.S. economy as a result of financial market bankruptcies caused by subprime mortgages. In several other interviews, he warned about the U.S. financial crisis of 2008 followed by global socioeconomic challenges driven by sovereign debt, inflation and currency crises.

"U.S. Home mortgages debt = $8.2 trillion. Due to the housing bubble in recent years, U.S. homebuyers took on more debt to buy overpriced homes, thus reducing share of disposable income. Many Americans refinanced their homes during the real estate boom to pay for living expenses. With the expected housing bubble burst, Americans could lose a significant part of their wealth and savings." His statements and predictions are now followed by investment advisors and researchers around the world.

**Dean Baker**

Macro-economist Dean Baker, co-director of the Center for Economic and Policy Research

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(a liberal-leaning think tank), warned about a housing bubble for years leading up to the housing and debt crisis. As an experiment to validate his claim, Baker used himself as a test subject. In 2004, he and his wife sold their two-bedroom condominium in the Adams Morgan neighborhood of Washington, D.C. and rented a similar unit a couple of blocks away. They owned the subject condominium for seven years and almost tripled their money. He bought his condominium for 1997 and sold it seven years later for $445,000.00. He was quoted as citing the following:

“People lose sight of things...If you go back to '98, '99 (in reference to the Tech Bubble and Silicon Valley), I was talking to people who said price-to-earnings ratios don't matter anymore. They were just saying kind of nonsense. You get a similar sort of mentality today with the housing market.”

In August, 2004, he stated that the housing enthusiasts, led by Alan Greenspan, insist that the run-up is not a bubble, but rather reflects fundamental factors in the demand for housing. He went on further to explain that instead of warning prospective home-buyers of the risk of buying housing in a bubble-inflated market, Greenspan gave a Congressional testimony in the summer of 2002 arguing that there is no such bubble.

**Peter Schiff**

Peter Schiff, CEO and Chief Global Strategist of Euro Pacific, predicted that the U.S. Economy was not strong and the housing market would crash leading to massive unemployment in a debate on Fox News on December 16, 2006. He was ridiculed by experts across the country for his predictions. Mr. Schiff is one of the few non-biased investment advisors to have correctly called the downturn of the housing market before it began (and advised as well as positioned his clients' portfolios accordingly). As a result of his accuracy in forecasting the U.S. Stock market, economy, real estate, the mortgage meltdown, credit crunch, and other contributing factors in the financial meltdown in America, he is becoming increasingly more renowned. He has been quoted in many of America's leading newspapers. His best-selling book, “Crash Proof": How to Profit

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from the Coming Economic Collapse was published in February of 2007.

C.A.E. Goodhart

Charles Albert Eric Goodhart, economist and professor at Emeritus University, takes a different stance in regards to the actual cause of the housing and debt crisis. His analysis of the housing and debt crises seemingly points the cause toward apparent overregulation. His research points to the Federal Reserve and their policies of maintaining increased liquidity as well as lower target interest rates which seemed to provide the perfect atmosphere for massive selling of mortgage-backed securities on the primary and subsequent markets. This, in turn, would lead to a massive demand on both sides of the market. From eager potential homebuyers to savvy and sophisticated investors looking to make massive returns on periodic interest, the increased liquidity and lower interests seemed to indiscriminately sweep all parties into the market of the tsunami of rising housing markets, gargantuan-sized secondary markets, and the monstrous derivatives market; all of which were functioning off the transactions at the closing tables when the homebuyers signed the agreement to make the mortgage payments.

In his working paper titled “The Subprime Crisis and Financial regulation: International and Comparative Perspectives”, author Kenneth W. Dam cites the following: “As C.A.E. Goodhart has pointed out, the crisis was “an accident waiting and ready to happen” based on very low interest rates in the US, UK and the Eurozone; the “Great Moderation” (an unparalleled period of low and stable inflation); and the tendency of the Federal Reserve during the chairmanship of Alan Greenspan to increase liquidity and lower the target interest rates promptly whenever financial markets weakened sharply, also known as the
Conclusion

So it is clear that these individuals and others foresaw what was about to transpire and took it upon themselves to warn the public as well as Capitol Hill. Their warnings were largely unheeded and, as a result, America faced the most severe financial crisis since the Great Depression. This proved to be a solid case of history repeating itself due to unscrupulous acts and lack of proper oversight.

3.2 The Housing Crisis and Its Impact on the Overall Financial Crisis

The financial crisis of 2007-2008 (commonly referred to as the Global Financial Crisis of 2008) was considered by many economists to have been the worst financial crisis in U.S. history since the Great Depression. Its very nature would have potentially threatened the collapse of major financial institutions and would literally plummet the United States as well as other economies into oblivion similar to the Dark Ages from a financial perspective had it not been for a government bailout. In many areas, the housing market suffered so severely that massive foreclosures, evictions and prolonged unemployment became the mainstay issues in cities such as Detroit, Michigan and other major cities. The overall crisis was a major contributing factor in the failure of major businesses as well as a decline in consumer wealth that was estimated into the trillions of dollars. Additionally, this would send financial shock-waves over the Atlantic and Pacific Oceans as the economies of the European Union as well as Asia were also severely affected as their respective banks had invested heavily into the once promising, but now toxic, assets that they held on their books.

The United States housing bubble peaked around 2004-06. However, the burst of the bubble caused the values of securities tied to the U.S. Real estate pricing to plummet thereby damaging the integrity of financial institutions globally. A complex interplay of political drumming, as well

as big banks eager to capitalize on the profits from a subsequent massive expansion of the home
ownership market, helped usher the way to easier access to loans for borrowers but also set the
stage for an over-valuation of the entire housing market. This factor, in tandem with questionable
lending and trading practices, inadequate oversight of mortgage origination and a lack of
adequate capital holdings in the banks and insurance companies to back the financial
commitments they were administering helped pave the way to the ultimate bust. However, the
United States Government eventually had to come to terms with the mess that it helped to create
and focus on solutions in order to stave off a complete and utter collapse of, not only the U.S.
economy, but the international economy at large.

3.3 The Aftermath and the Long and Winding Road to Recovery
A recent article by Bloomberg (dated April 20, 2015), titled “Few who lost homes will buy again
soon amid tight credit”, stated the following:

“Only about one in four former homeowners who lost property during the housing crash will soon become
buyers again as tight credit keeps many out of the U.S. real estate market”, according to a National Association of
Realtors study. Of the 9.3 million owners who went through foreclosure or were forced to sell at a loss, about
950,000 already have bought again and 1.5 million more are likely to make a purchase in the next five years, the
trade group said today...

They won’t be a significant factor to the housing market going forward,” Lawrence Yun, Chief Economist at the
National Association of Realtors, said in a telephone interview. “The majority of the 9.3 million won’t be coming
back...The U.S. homeownership rate fell to 64 percent at the end of last year, a two-decade low and down from a
high of 69.2 percent in 2004, according to Census Bureau data. The ownership rate will drop to 63.5 percent by
2016 and plateau for years, according to report last week by Goldman Sachs Group Inc. analysts led by Hui Shan.
The 9.3 million homeowners the Realtors group studied gave up their homes through more than 5 million
foreclosures and 4 million other distressed transactions since early 2007, including short sales and deeds in lieu of
foreclosure, Yun said. The estimate that 950,000 buyers have returned to date is based on surveys showing they
accounted for about 7 percent of existing-home sales since 2012, when those who lost property to foreclosure
became eligible again for Federal Housing Administration financing”, Yun said.
3.3.1 Quantitative Easing

Investopedia.com defines Quantitative Easing as follows:

"An unconventional monetary policy in which a central bank purchases government securities or other securities from the market in order to lower interest rates and increase the money supply. Quantitative easing increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity. Quantitative easing is considered when short-term interest rates are at or approaching zero, and does not involve the printing of new banknotes."

In the aftermath of the 2007-2008 housing and debt crisis, the American Economy was almost at a halt and on the verge of serious trouble. Then the Federal Reserve stepped in and announced that it would implement an initiative referred to "Quantitative Easing". An explanation of this process is necessary in order to help understand its positive affects as well as the potential damaging consequences. In utilizing the strategy of quantitative easing, typically central banks target the money supply by buying or selling government bonds. When they seek to promote economic growth, they tend to buy government bonds. This in turn lowers short-term interest rates and increases the money supply. However, it has been shown that this strategy tends to lose effectiveness when interest rates approach zero, thereby forcing banks to try other strategies in order to stimulate the economy. Quantitative Easing typically targets commercial bank and private sector assets and attempts to spur economic growth by encouraging banks to lend money. However, if the money supply increases too quickly, quantitative easing can lead to higher rates of inflation. And this is based upon the simple model of supply and demand. Further explanation dictates that this due to the fact that there is still a fixed amount of goods for sale in spite of the fact that there is more money available in the economy.

3.3.2 The Dodd-Frank Act

President Barack Obama said at the signing ceremony for the Dodd-Frank Wall Street Reform and Consumer Protection Act on July 21, 2010 the following:
"Unscrupulous lenders locked consumers into complex loans with hidden costs. Firms like AIG placed massive, risky bets with borrowed money. And while the rules left abuse and excess unchecked, they left taxpayers on the hook if a big bank or institution ever failed."

The president first described the inadequate prudential supervision and regulation while noting that "our financial sector was governed by antiquated and poorly enforced rules that allowed some to game the system and take risks that endangered the entire economy".

Rule-making, on-the-ground examination and inspection as well as enforcement actions are ways regulatory agencies ensure financial institutions operate safely and soundly. The aftermath of the financial crisis began to unravel and reveal how the activities of irresponsible financial institutions and, likewise, the lack of prudential supervision and regulation ultimately helped lead to one of the most profound financial crisis in American history. It revealed that regulators oftentimes failed to keep up with innovations in the financial marketplace or financial institutions' reckless behaviors.

In response, the Dodd-Frank Act impacts several factors in the industry:

1) It poses more stringent prudential standards including tougher requirements for capital, leverage, risk management, mergers and acquisitions, and stress-testing; particularly on bank holding companies that could threaten the stability of the American financial system;

2) It gives the Federal Reserve Bank more authority to scrutinize the activities of non-bank and non-member companies;

3) It requires more transparent trading and clearing of derivatives and, through the "Volcker Rule", prohibits insured depository institutions such as commercial banks from dealing in derivatives for their own account;

4) It requires banks, lenders and others, whenever they securitize an asset, to hang on to a
portion of the credit risk;

5) it established the Financial Stability Oversight Council, whose membership includes the heads of all the financial regulatory agencies. The Council gives regulators a forum to compare notes, scan the nation’s financial system for signs of trouble, and identify financial firms that could threaten the U.S. Financial system.

To help failing firms fail without threatening the American financial stability and keep taxpayers off the hook, Dodd-Frank created new powers and curtailed old ones such as:

1) The Orderly Liquidation Authority was created as a way to take systematically important non-bank firms that are on the verge of collapse, place them under government receivership, and unwind them in such a way that insulates the U.S. Economy from the effects of their collapse;

2) The Federal Reserve loses some autonomy to extend emergency credit. Dodd-Frank allows the Federal Reserve to make emergency loans but only through programs that are broadly available to many firms, not to a single firm;

3) Requires that large banks and other financial institutions submit so-called “living wills” which are documents designed to explain to the regulatory agencies how the firms would deal with their own demise in the absence of extraordinary government support.

In the years before the housing crisis, home prices steadily rose and lending standards steadily loosened. Consumers borrowed without demonstrating their ability to repay. Likewise, lenders extended complicated, interest-only mortgages to borrowers who often did not understand them and could not afford them. At the same time, these mortgages were bundles into securities that were sold to the secondary market with great ease. These practices may have seemed sustainable when home prices were rising but they proved disastrous once the market burst. As the bubble burst, many consumers were unable to keep up with payments or refinance and, as a result,
millions of consumers defaulted or found themselves stuck with mortgage debts that exceeded their home's worth as the foreclosure crisis began to affect the housing prices of whole neighborhoods.

In response, Dodd-Frank established a new regulatory agency dedicated to financial consumer protection and prohibited many of the lending practices that proliferated in the years before the crisis such as:

1) The new agency is the Bureau of Consumer Financial Protection, which has the power to enforce consumer protection laws. This Bureau also has broad new consumer protection authority over medium-sized and larger banks and financial institutions such as deposit taking and check cashing as well as to set and enforce rules against abusive acts or practices:

2) Requires lenders to verify a mortgage borrower's ability to repay a loan and establishes the concept of qualified mortgages (mortgage loans that meet certain criteria and, as a result, are considered to satisfy the ability-to-pay requirement). Under this provision, a violation of the qualified mortgage is a defense for the homeowner against foreclosure;

3) Bans yield-spread premiums which was a form incentive compensation that often encourages originators to steer prospective borrowers into more expensive loans.

Dodd-Frank was constructed to reach beyond mere prudent supervision, orderly liquidation, and consumer protection, but these three areas are at its heart. Since Barack Obama signed Dodd-Frank into law various federal agencies, including the Federal Reserve, have been hard at work translating the statute's broad directions into specific regulations they can enforce. However, its passage, enactment, and the president's signature were only the beginning. But the looming question is whether or not this piece of legislation will suffice in eventually restoring the

13 https://en.wikipedia.org/wiki/Dodd%E2%80%93Frank_Wall_Street_Reform_and_Consumer_Protection_Act
protections brought forward by provisions of the Glass-Steagall Act that had been in place for several decades and worked to protect the integrity of the American banking system.

3.3.3 The Volcker Rule

The Volcker Rule is in reference to subsection 619 (12 U.S.C., subsection 1851) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, originally proposed by former American Federal Reserve Chairman Paul Volcker in an effort to restrict American banks from making certain types of speculative investments that do not benefit their customers. Volcker argued that certain speculative investments played a key role in the financial crisis of 2007-2008. And he further argued that, since a functioning commercial banking system is essential to the stability of the entire financial system, for banks to engage in high-risk speculation created an unacceptable level of systemic risk and that the vast increase in the use of derivatives, designed to mitigate risk in the system, had produced the exact opposite effect. The rule's provisions were scheduled to be implemented as a part of the Dodd-Frank Act on July 21, 2010 but were delayed. On December 10, 2013, the necessary agencies approved regulations implementing the rule, which were scheduled to go into effect on April 1, 2014. On January 14, 2014, revised final regulations were adopted. The Volcker Rule was first publicly endorsed by President Barack Obama on January 21, 2010. 14

14 https://en.wikipedia.org/wiki/Dodd%E2%80%93Frank_Wall_Street_Reform_and_Consumer_Protection_Act
Chapter Four: Case Studies

4.1 Case Study of Lehman Brothers (source: investopedia.com)

Lehman Brothers has been penned in the history books as the biggest corporate bankruptcy in U.S. History. At a congressional hearing on October 6, 2008, Congressman Henry Waxman said to Richard S. Fuld, Jr. (former chief executive of Lehman Brothers), “You made all this money by taking risks with other people’s money. The system worked for you, but it didn’t seem to work for the rest of the country and the taxpayers, who now have to pay $700 billion to bail out our economy.” Fuld’s response was: “I take full responsibility for the decisions that I made and the actions that I took.” When the subject of remuneration was presented shortly after, he defended the compensation system that paid him roughly US $350 million between 2000 and 2007. He then explained that the compensation committee of his company spent a tremendous amount of time making sure that the interests of the executives were aligned with shareholders.

On September 15, 2008, Lehman Brothers filed for bankruptcy. Lehman Brother’s would go down in history as the largest bankruptcy in history. With $639 billion in assets and $619 billion in debt, its assets far surpassed those of previous bankrupt giants such as WorldCom and Enron. At the time of its collapse Lehman Brothers was the fourth-largest American investment banks, with 25,000 employees worldwide. Its collapse also made it the largest victim of the American subprime mortgage-induced financial crisis that swept through the global financial markets in 2008 and contributed to the erosion of nearly $10 trillion in market capitalization from global equities markets in October 2008 which became the largest monthly decline on record.

The History of Lehman Brothers

The Lehman Brothers Company began with humble origins. It was founded in 1850 by a German immigrant named Henry Lehman and his brothers Emanuel and Mayer in Montgomery,
Alabama. The Lehman Brothers Company had to contend with plenty of challenges over its long tenure, including the railroad bankruptcies of the 1800s, the Great Depression of the 1930s as well as two world wars, a capital shortage when it was spun off by American Express in 1994, the Long Term Capital Management collapse (a large hedge fund led by Nobel Prize-winning economists and renown traders that nearly collapsed the global financial system in 1998 as a result of high-risk arbitrage trading strategies) and Russian debt default of 1998 but survived them all. However, despite its ability to survive past disasters, the collapse of the American housing market ultimately brought Lehman Brothers to its knees as its headfirst rush into the subprime markets proved to be the biggest mistake in its decision-making.

The Primary Factor
In 2003 and 2004, with the American housing boom well underway, Lehman Brothers acquired five mortgage lenders to include subprime lender BNC Mortgage and Aurora Loan Services (which specializes in Alt-A loans or loans made to borrowers without full documentation but at typically higher rates of interest). Initially, Lehman's acquisitions of these companies saw record revenues and enabled revenues in the capital markets unit to surge 56% from 2004 to 2006 which was a faster growth rate than other businesses in investment banking or asset management. The company securitized $146 billion of mortgages in 2006, a 10% increase from 2005. Lehman Brothers reported record profits every year from 2005 to 2007. In 2007, the company reported net income of a record $4.2 billion on revenue of $19.3 billion.

Mistakes and Miscalculations
In February 2007, the Lehman Brothers stock reached a record $86.18, giving Lehman Brothers a market capitalization of close to $60 billion. However, by the first quarter of 2007, indications of problems in the American housing market were becoming apparent as defaults on subprime mortgage loans had risen to a seven-year high. On March 14, 2007, a day after the stock had its biggest one-day drop in five years on concerns that rising defaults would affect Lehman's profitability, the firm reported record revenues and profit for its fiscal first quarter. In the post-
earnings conference call, Lehman's chief financial officer said that the risks posed by rising home delinquencies were well contained and would have little impact on the firm's earnings. He also said that he did not foresee problems in the subprime market spreading to the rest of the housing market or hurting the U.S. economy.

**Lehman Brothers Crisis**

As the credit crisis erupted in August 2007 with the failure of two Bear Stearns hedge funds, Lehman's stock fell sharply. During that month, the company eliminated 2,500 mortgage-related jobs and shut down its BNC unit. In addition, it also closed offices of Alt-A lender Aurora in three states. Even as the correction in the U.S. housing market gained momentum, Lehman continued to be a major player in the mortgage market. In 2007, Lehman underwrote more mortgage-backed securities than any other firm, accumulating an $85-billion portfolio, or four times its shareholders' equity. In the fourth quarter of 2007, Lehman's stock rebounded, as global equity markets reached new highs and prices for fixed-income assets staged a temporary rebound. However, the firm did not take the opportunity to trim its massive mortgage portfolio, which in retrospect, would turn out to be its last chance.

**The Road to Failure**

Lehman's high degree of leverage (the ratio of total assets to shareholders equity) was 31 in 2007, and its huge portfolio of mortgage securities made it increasingly vulnerable to deteriorating market conditions. On March 17, 2008, following the near-collapse of Bear Stearns - the second-largest underwriter of mortgage-backed securities - Lehman shares fell as much as 48% on concern it would be the next Wall Street firm to fail. Confidence in the company returned to some extent in April, after it raised $4 billion through an issue of preferred stock that was convertible into Lehman shares at a 32% premium to its price at the time. However, the stock resumed its decline as hedge fund managers began questioning the valuation of Lehman's mortgage portfolio.
On June 9, Lehman announced a second-quarter loss of $2.8 billion, its first loss since being spun off by American Express, and reported that it had raised another $6 billion from investors. The firm also said that it had boosted its liquidity pool to an estimated $45 billion, decreased gross assets by $147 billion, reduced its exposure to residential and commercial mortgages by 20%, and cut down leverage from a factor of 32 to about 25. On August 22, shares in Lehman Brothers closed up 5% on reports that the state-controlled Korea Development Bank was considering buying the company. However, most of those gains quickly eroded as news emerged that Korea Development Bank was facing difficulties with regulators and attracting partners for the deal. On September 9, Lehman shares plunged 45% after it was reported that Korea Development Bank had put talks on hold. On September 10, Lehman Brothers announced a loss of $3.9 billion and their intent to sell off a majority stake in their investment-management business, which included Neuberger Berman, resulting in a 7% slide in their stock that day.

**Conclusion: The End of Lehman Brothers**

On September 13, Timothy F. Geithner, then president of the Federal Reserve Bank of New York, called a meeting to discuss the future of Lehman Brothers, which included the possible emergency liquidation of its assets. The liquidation of its assets alarmed every bank and company in 2008, according to Mid-Ocean Partners CEO Ted Virtue. Lehman Brothers then reported that it had been in talks with Bank of America and Barclays Bank for a possible sale of the company. On September 14, The New York Times reported that Barclays had ended its bid to purchase all or part of Lehman Brothers and a deal to rescue the company from liquidation collapsed. It emerged later that a deal had been vetoed by the Bank of England and the UK's Financial Services Authority. Leaders of major Wall Street banks continued to meet late that day to prevent the company's rapid failure, Bank of America's alleged involvement also appeared to end as federal regulators resisted the government's involvement in the company's sale. This signaled the end for one of the giants in the American financial sector.

On the day of its bankruptcy filing of September 15, 2008, the Dow Jones closed down just over
500 points (or -4.4%), at the time the largest drop by points in a single day since the days following the attacks of September 11, 2001 (this drop would be subsequently exceeded by a -7.0% plunge on September 29, 2008).

4.2 Case Study of The GSEs: Fannie Mae and Freddie Mac

Government-Sponsored Entities (or GSEs) in America are enterprises that have the full financial backing of the United States Government. The two GSEs that deal primarily with the mortgage industry are The Federal National Mortgage Association (better known as Fannie Mae), and The Federal Home Loan Mortgage (better known as Freddie Mac). In 1938, Fannie Mae was established as a part of President Franklin Delano Roosevelt's New Deal Legislation. Fannie Mae was a part of the U.S. Government until its privatization in 1968. Likewise, Freddie Mac was created in 1968. As Kate Pickert of Time explains, “Freddie Mac was launched primarily to keep Fannie Mae from functioning as a monopoly”. These GSEs do not lend directly to homeowners. Instead, they are in the business of loan securitization which means that they buy loans from banks, bundle them and resell the loans to investors, thereby creating a liquid secondary market for mortgages. Under this arrangement, the originating financial institutions no longer had to hold onto the mortgages but could sell them into the secondary market shortly after origination. This, in turn, freed up their funds such that they could then make additional mortgages.

Further, Fannie Mae and Freddie Mac both guarantee the securities. If the loans underlying the newly created securities go into default then both GSEs would step in to make sure the investors are covered from loss. Although both enterprises have been historically financed privately through pools of investors, the federal government would step in and back the GSEs in the event of a crisis in the mortgage market. In other words, the federal government implicitly guaranteed both GSE’s securitized loans. This allowed them to borrow at interest rates below those of the financial markets and to hold much lower capital requirements than commercial or investment banks. The aggregate value of this subsidy had been estimated to range between $119 billion to
$164 billion, of which shareholders receive respectively between $50 billion and $97 billion. During the time-line leading up to the 2007-2008 housing and debt crisis, Fannie Mae and Freddie Mac had dominated the secondary mortgage market, providing 75% of financing for new mortgages through securitization at the end of 2007. And at the end of 2010, they still held about 50% of securitized, first-lien home loans.

**Monopoly Power**

Fannie Mae and Freddie Mac had many critics who raised a red flag of concern about the risks the companies were allowed to take due to their implicit government backing. However, despite these early warnings, the GSEs found many allies in Congress. Despite the fact that there were numerous calls for tighter regulation of the GSEs, Fannie Mae and Freddie Mac would soon counter this by hiring scores of lobbyists and consultants, make campaign contributions through their own political action committees, and fund nonprofit organizations in an effort to influence members of the U.S. Congress to ensure that they were allowed to continue to grow and take on risk under their congressional charters and implied federal backing.

**Wall Street and the Feeding Frenzy**

Spurred by the potentially record-setting profits experienced by the GSEs, its rivals on Wall Street began to create a liquid and expanding market in the mortgages themselves, tied to short-term interest rates such as adjustable-rate mortgages that frequently had enticing characteristics such as interest-only provisions that home-buyers found attractive. This became the launchpad for the subprime lending frenzy that created a juggernaut of innovation that resulted in mass profits. Investors such as pension funds, foreign governments, hedge funds, and insurance companies readily purchased the sophisticated securities that Wall Street created out of all the mortgages it began purchasing. Then, as Fannie Mae and Freddie Mac saw their market shares beginning to drop, they too began purchasing and guaranteeing an increasing number of loans and securities with low credit quality.
When Prices Fall, the Music and Dancing Stops

It is a well-known fact by economists that when home prices rise then there is less risk of mortgage default. The equity in a home is the single biggest risk measure of default. Homeowners with large amounts of equity do not walk away from their mortgages, and usually refinance out of a mortgage with soon-to-be expected payment increases into another mortgage with low initial payments. This is the model upon which homeowners, mortgage originators, Wall Street, credit rating agencies and investors built the colossal mortgage debacle in the years leading up to the 2007-2008 housing and debt crisis.

In 2007, as defaults of mortgage loans began to explode, both GSEs began to experience large losses on their retained portfolios, especially on their Alt-A and subprime investments. In 2008, the sheer size of their retained portfolios and mortgage guarantees led the Federal Housing Finance Agency (FHFA), which is responsible for oversight of the GSEs, to conclude that they would soon be insolvent. By September 6, 2008, it was clear that the market believed the firms were in financial trouble, and the FHFA put the two companies into conservatorship, one of the most sweeping government interventions in private financial markets in decades. U.S. Treasury Secretary Henry M. Paulson, appeared at a press conference stating that the decision to place the two GSEs into conservatorship was one that he fully supported. American taxpayers were left on the hook for future losses beyond the companies' existing and shrinking capital cushions.

Conclusion

It has been said that members of the U.S. Congress are largely to blame for allowing the companies to continue to expand in size and risk, as well as encouraging the companies to continue to purchase an increasing number of low-credit quality loans, despite the warnings and red flags raised by some in the market. Fannie Mae and Freddie Mac's debt and credit guarantees grew so large that Congress should have recognized the systemic risks to the global financial system these companies posed as well as the risks to American taxpayers, who were expected to eventually foot the bill for the entire ordeal.
4.3 Case Study of AIG and Government Bailout

American International Group (AIG) is an American multinational insurance corporation with more than 88 million customers in 130 countries. AIG companies employ over 64,000 people in 90 countries. Its corporate headquarters are located in New York City, its British headquarters in London; its continental European operations are based in La Defense, Paris, and its Asian headquarters are located in Hong Kong. The company serves 98% of the Fortune 500 companies, 96% of Fortune 1000, and 90% of Fortune Global 500, and insures 40% of Forbes 400 Richest Americans. AIG was ranked 40th largest company in the 2014 Fortune 500 list (source: Wikipedia.com/AIG). The company operates through three businesses:

1) AIG Property Casualty;
2) AIG Life and Retirement;
3) United Guaranty Corporation

AIG traces its roots back to 1919, when Cornelius Vander Starr established a general insurance company, known as American Asiatic Underwriters (AAU), in Shanghai, China. Business grew rapidly, and two years later, Starr formed a life insurance operation. By the late 1920s, AAU had branches throughout China and Southeast Asia, including the Philippines, Indonesia, and Malaysia. In 1926, Starr opened his first office in the United States, American International Underwriters Corporation (AIU). He focused on opportunities in Latin America and, in the late 1930s, AIU entered Havana, Cuba. The steady growth of the Latin American agencies proved significant as it would offset the decline in business from Asia due to the impending World War II. In 1939, Starr moved his headquarters from Shanghai, China to New York City. For decades, AIG was the world's biggest insurer, a company known around the world for providing protection for individuals, companies, and others.

Fast-forward to September 16, 2008 when the American Government gave AIG a bailout of $85 billion. In exchange, the American Government received roughly 80% of the firm's equity. Had
It not been for this emergency intervention, the company would have gone under. But the American Government's involvement pulled it back from the brink of bankruptcy. This case study examines how a major global player went from a too-big-to-fail mighty giant to a struggling company that relied on government intervention to save itself.

A division of the AIG Company entitled AIG Financial Products (AIGFP), based out of London, discovered a new way to make money in the late 1990s. A new financial tool known as a collateralized debt obligation became prevalent among large investment banks and other large institutions which lumped various types of debt, from the very safe to the very risky, into one bundle. Many large investors holding mortgage-backed securities created CDOs, which were filled with subprime loans. AIGFP made the decision to insure these products through credit default swaps with the general understanding that the chances of having to pay out on this insurance arrangement was highly unlikely. Following this model, the division's revenue rose from $737 million to over $3 billion in about five years.

But when foreclosure rates rose to incredible levels, AIG had to cover the arrangements that it had agreed to, thereby causing a huge hit to its revenue streams. Accounting problems within the division also caused losses. This, in turn, eventually lowered AIG’s credit rating, which caused the company to post collateral for its bondholders, thereby causing even more worries about the company's financial situation. It was clear that AIG was in danger of insolvency which then prompted the American Government to step in. What was the American Government's incentive to get involved? The simple answer according to economists would be summarized in one statement: Too Big to Fail.

Conclusion

AIG clearly showed that it fell victim to the same fate as many other financial firms that were taken in by the promise of quick and easy return on investment. And, like other companies, it would eventually ease its protocols and internal oversight, thereby leading to its own decline. And like many other firms, the ultimate solution will cost the American taxpayer hundreds of
billions, if not trillions, in the future.

4.4 Case Study on Reintroducing Glass-Steagall

An article by The Hill, dated July 7, 2015, titled “Warren, McCain introduce bill to bring back Glass-Steagall, stated that Senators Elizabeth Warren (D-Mass.) and John McCain (R-Ariz.) are reintroducing legislation to revive the Glass-Steagall Act, which would force big banks to split their investment and commercial banking practices. They were cited as saying:

“Despite the progress we’ve made since 2008, the biggest banks continue to threaten our economy”, said Warren, an ardent Wall Street critic, in a statement. “The biggest banks are collectively much larger than they were before the crisis, and they continue to engage in dangerous practices that could once again crash our economy.” John McCain said that the repeal of Glass-Steagall led to “a culture of dangerous greed and excessive risk-taking” in the banking industry. He went on further to say, “Big Wall Street institutions should be free to engage in transactions with significant risk, but not with federally insured deposits”.

On Tuesday, July 7, 2015, Senator Warren announced that she is reintroducing a “21st Century Glass-Steagall Act” that would limit taxpayer bailouts of complex financial institutions. The modern-day version of the Banking Act of 1933 would separate traditional banks that have savings and checking accounts and are insured by the FDIC (Federal deposit Insurance Corporation) from riskier financial institutions that offer services such as investment banking, insurance, swap dealings, and hedge fund and private equity activities. The bill would prohibit institutions insured by the FDIC from being or becoming affiliated with, or having common ownership or control with, any insurance company, securities entity or swaps entity. The institutions would also be prohibited from engaging in any activity that would cause it to qualify as an insurance company, securities entity or swaps entity.

Further, the bill would prohibit individuals who are officers, directors, partners or employees of any insurance company, securities entity or swaps entity from simultaneously serving as officers, directors, employees or any other institutions-affiliated party of any insured depository
institution. The bill also amends certain definitions such as “business of banking” to prevent national banks from engaging in risky activities and will aim to address “Too Big to Fail”. On July 12, 2015, Senator Warren told Bloomberg Television’s Peter Cook: “It will take a lot of tools to get rid of too-big-to-fail, but one of them ought to be that if you want to do high-stakes gambling, good on you, but you do not get access to people’s checking accounts and savings accounts.”

Senator Warren, who announced plans for the bill at a hearing on the Dodd-Frank Act implementation, told regulators testifying before the Senate Banking Committee that she didn’t expect them to back her right away. She went on further to say, “Based on what the regulators did to Glass-Steagall over the last 30 years, I don’t expect anyone on this panel will jump and endorse the new Glass-Steagall bill,” Senator Warren told officials from the Treasury Department, Federal Reserve, and other agencies. “Even so we’re going to keep pushing for it.”

**Conclusion**

Based upon the obvious implications of deregulation and subsequent lack of oversight in protecting America’s financial system in the midst of seemingly reckless decision-making and actions in an effort to rake in massive profits, some have heard the call for the return of one of the most important pieces of legislation in American history and are willing to push for the return of Glass-Steagall.
Chapter Five: Summary and Recommendations

Summary
The 2007-2008 housing and debt crisis is believed to have occurred primarily due to the repeal of Glass-Steagall at the urging of big banks and their lobbyists on Capitol Hill. Further, it is noted that a subsequent lack of oversight and enforcement led to financial institutions implementing innovative creations in the market in which to generate massive profits. These innovations ultimately caused massive damage and sent shock-waves across the American Economy and across the oceans, thereby causing a global financial calamity that affected individual homeowners as well as whole institutions and their investors. Institutions that were considered to be among the most financially sound would suffer massive losses and some would ultimately have no other resort than to declare bankruptcy. Investors who bought and held these seemingly hugely-profitable assets soon learned how toxic they were as their book values of assets began drying up and they were forced to take huge losses as the actual mortgages began to be defaulted on by homeowners who eventually realized that they could not afford these obligations.

The secondary market established by the GSEs, their Wall Street rivals, and the unlucky investors who invested large amounts of capital while counting on an ever-increasing and expanding housing market eventually proved to be a major contributor to the overall economic downturn based upon their lack of appropriate internal protocols and oversight regarding their risk-taking and prudent decision-making.

Currently, there is a petition by concerned and informed Americans to reinstate Glass-Steagall. Mitchell Gershten of the "Reinstate the Glass-Steagall Act" Petition sent to Capitol Hill stated the following in his Petition Statement on his website:

"We are in the midst of the greatest transfer of wealth to a scarce few individuals and
banks, all of it being done within the boundaries of laws that the bankers themselves have either written or paid well to have written. Glass-Steagall prevented this egregious behavior and must be reinstated.”

The “Reinstate the Glass-Steagall Act” website states the following in its Petition Background:

“Provisions of the Glass-Steagall act directly supported a more level economic playing field and a six decade rise of a more egalitarian financial system and strong middle class. It did so by limiting the power of financial institutions. Its 1999 repeal permitting mergers of commercial and investment banks ushered in the current era of reckless and potentially ruinous banking practices which in 2008, brought the USA and the world to the brink of financial disaster. Despite notable legislative efforts to correct this, intensive lobbying from the banking industry has seen to it that essentially nothing has changed. The economy remains at great risk...Our banking system must be brought back to serving the people first while reliably sustaining the economy that supports us all, rather than abetting any further drain on its lifeblood by the wealthiest among us...Stability in America depends upon a viable middle class. The Glass-Steagall act provided excellent protections for that class and the economy as a whole. While it will require updating to better function in the modern world, its reinstatement will go a long way to provide a powerful economic safety net that will more reliably limit ongoing risk to the strongest economy in the world.”

There are approximately 114,000 signatures with a goal of 125,000 signatures that are needed. This is a clear indication that some Americans are keenly aware of the implications of continuing to ignore the lack of transparency as well as proper legislation that maintains the integrity of the banking system in America. Unfortunately, according to a recent survey conducted by the author, the number of Americans that are even aware of Glass-Steagall represents a small number (see Figure 2.2). The survey was conducted in a random order with 100 everyday Americans from all walks of life. This information clearly indicates that the vast majority of the American public literally has no clue about important legislation designed to protect their interests as well as the overall well-being of the American economy. Figure 2.2 illustrates the results of the poll taken.

In summary, the housing and debt crisis has cost the American taxpayer hundreds of billions of

15 http://petitions.moveon.org/sign/reinstate-the-glass-steagall-5?source=s.fwd&ref_by=14085378
dollars, if not more, and will serve to be written in the history books as one of the profound tests of the financial systemic strength and vulnerability of the American Economy of the 21st Century.

**Recommendation**

The Glass-Steagall Act of 1933 was a historic piece of legislation that was enacted in the aftermath of the worst economic depressions in American history. It was constructed to ensure that the integrity of the American mortgage and overall financial system would remain solid and protected against certain actions that would threaten their very foundation. History has shown us that unchecked power tends to corrupt. In the case of the subject matter covered in this paper, it appears to have been proven a true statement. The Glass-Steagall Act protected the American people and the overall integrity of the American financial system for over seven decades from unfair, reckless behavior in the financial and mortgage sector.

As we move forward into the 21st Century, it is important to remember the mistakes of the past and work diligently to ensure that, as a society, we never repeat them if we are to move forward progressively into a future that our children and their children can appreciate while enjoying the prosperity that we collectively wish for them as we toil in our hard work and efforts for their well-being.

Based upon the information presented in this paper it is clear that the American political establishment must consider restoring the provisions of the Glass-Steagall Act in its entirety as well as examine other factors that were not present upon its initial adoption and enactment in 1933. Likewise, the Glass-Steagall Act as well as the practices and procedures of the Federal Reserve Bank should be taught in the American education system rigorously to ensure the public is aware of its existence and the potentially devastating effects that can occur in the absence of proper and thorough government legislation and oversight of an industry that has far-reaching impact on whole economies and the global economy at large. The belief is that these actions
would scale down potentially financially unhealthy innovations and extremely risky endeavors in the mortgage and debt markets that could potentially create the boom and bust cycle that the American financial system witnessed in the aftermath of the repeal of Glass-Steagall. Finally, they would serve to educate the consumer, thus helping them to make wiser choices so as not to repeat the mistakes of the past.

While some information presented in this paper postulate that it was not deregulation but overregulation by the Federal Reserve Bank and its policies that actually caused the crash, it is clear and apparent that had the Glass-Steagall Act not been repealed then the unscrupulous activities that transpired in its aftermath would not have been allowed by law, thereby ensuring that commercial banking and securities trading would not be allowed to intermingle. History has shown clearly that the removal of important safeguards to the integrity of the economy is usually proceeded by calamity of potentially disastrous proportions.
Survey of Sample Population and knowledge of Glass-Steagall

"Do you know what the Glass-Steagall Act is?"

(96 percent did not know)

(4 percent knew what Glass-Steagall was)

Figure 2.2 (Survey conducted by author from July 23 -25, 2015)


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