



**Examining the Causes of the Credit Crisis of 2008
Minority Staff Analysis**

**U.S. House of Representatives
Committee on Oversight and Government Reform**

**Tom Davis, Ranking Member
October 6, 2008**

I. Executive Summary

In the midst of the most serious financial crisis in a generation, some claim that deregulation is entirely to blame. This is simply not true and more importantly serves to grossly oversimplify a problem whose roots run deep and involve myriad actors and issues. The simple truth is that many share the blame, and pointing to just one person or organization does a disservice to the American people.

In a time of crisis, the American people cannot afford the same old partisan finger pointing; they need and deserve real, non-partisan oversight. We need a series of hearings that will focus on the root causes and how we can fix a system in order to avoid financial meltdowns in the future. This minority staff analysis attempts to objectively explore the causes of the financial crisis we are in and how companies like Lehman Brothers and AIG contributed to this crisis.

The current credit crisis is a complex phenomenon with its roots in a number of places involving a myriad of people and institutions. Key players and institutions include Members of Congress, well-respected members of Republican and Democratic administrations, the Federal Reserve Board, Fannie Mae, Freddie Mac, the Department of Housing and Urban Development (HUD), the Securities and Exchange Commission (SEC), the major private sector credit rating agencies, banks, mortgage brokers, and consumers.

There is no single issue or decision one can trace as a cause of the current financial crisis; rather it was multiple decisions and issues involving many actors over time that led us to where we are today. However, we can point to organizations that contributed greatly to the problem and how their role was the catalyst for others to become involved and eventually fail. Fannie Mae and Freddie Mac fall into this category. They were the central cancer of the mortgage market, which has now metastasized into the current financial crisis. With the help of a loose monetary policy at the Federal Reserve, an over-reliance on inaccurate risk assessment and a fractured regulatory system, this cancer spread throughout the financial industry.

A few key elements are critical in understanding how we got to where we are today.

The Role of Fannie Mae and Freddie Mac in Creating the Credit Crisis

- If Congress had successfully restructured Fannie Mae and Freddie Mac in 2005 after the Office of Federal Housing Enterprise Oversight (OFHEO) reported on their fraudulent accounting activities, we would likely not be in the crisis we have today. The over \$ 1 trillion dollar binge into subprime and mortgage backed securities that Fannie Mae and Freddie Mac embarked upon from 2005 to 2007 would likely not have happened.

- By 2005, Federal Reserve Chairman Alan Greenspan was so concerned that he characterized the concentration of systemic risk inherent in the ever-growing portfolios of Fannie and Freddie as, “placing the total financial system of the future at a substantial risk.” Recent events have unfortunately proved him right.
- The transformation of Fannie Mae and Freddie Mac into the “Affordable Housing Center” was a laudable goal, but to push predatory subprime lending to unspeakable heights and to encourage questionable lending practices believing housing prices would continue to soar was beyond reason.
- The politicization of Fannie Mae and Freddie Mac over the last decade seriously undermined the credibility of the organizations and prevented their restructuring and reform, with Democrats viewing any attempt at curtailing their behavior as an attempt at curtailing affordable housing. Between 1998 and 2008, Fannie and Freddie combined spent nearly \$175 million lobbying Congress, and from 2000 to 2008 their employees contributed nearly \$15 million to the campaigns of dozens of Members of Congress on key committees responsible for oversight of Fannie and Freddie. Those who opposed the restructuring of Fannie Mae and Freddie Mac were unwittingly helping to build a house of cards on risky mortgage backed securities.
- The motivations for Fannie Mae and Freddie Mac to gamble with taxpayer money on bad nonprime mortgage bets was not entirely a matter of good intentions gone awry. Greed and corruption were unfortunately part of the equation as well. The size and growth of Fannie Mae and Freddie Mac leading up to their collapse were nothing short of astonishing. From 1990 to 2005, Fannie Mae and Freddie Mac grew more than 944% to \$1.64 trillion, and their outstanding liabilities grew 980% to \$1.51 trillion. These liabilities were equal to 32.8% of the total publicly-held debt of the U.S. Government, which in 2005 stood at \$4.6 trillion.

Lehman Brothers, AIG and the Challenges of Statistical Risk Modeling

- Lehman Brothers didn’t cause this mess but it certainly jumped head first into trying to make money on securitizing mortgage-backed instruments. They followed on the heels of Fannie Mae and Freddie Mac and for precisely the same reasons. If we understand the initial cause of the cancer at Fannie and Freddie, then we can understand how it metastasized to Lehman Brothers, Wachovia, Countrywide, and beyond.
- AIG is somewhat different; bad management decisions were made in thinking that the mortgage-backed securities and derivatives could be insured. Yet underlying its bad decisions was the same mistaken reliance on sophisticated but inaccurate computer models, trusting the rating agencies were accurate and that Fannie Mae and Freddie Mac couldn’t possibly fail.

Regulation and the Credit Crisis

- Democrats are wrong in insisting that de-regulation is the primary cause of the financial crisis. Deregulation is not the problem, rather it is the fractured regulatory system that has banks, investment institutions, mortgage brokers, and insurance companies all being overseen by different and often competing federal and state agencies. The problem is a lack of coherent regulatory oversight that has led mortgage brokers and lending institutions to write questionable loans and investment institutions to play fast and loose with other people's money in purchasing bad mortgage-backed assets.
- The words "regulation" and "deregulation" are not absolute goods and evils, nor are they meaningful policy prescriptions. They are political cant used to describe complex policy discussions that defy simplistic categorization. The key to successfully regulating markets is not to either create more or less regulation in an unthinking way. Government needs to design smart regulations that align the incentives of consumers, lenders and borrowers to achieve stable and healthy markets.

Credit Rating Agencies and the Practice of "Rating Shopping"

- Some firms that bundled subprime mortgages into securities were engaging in "rating shopping" – picking and choosing among each of the three credit rating agencies in order to find the one willing to give their assets the most favorable rating. Rating agencies willing to inflate their ratings on subprime mortgage-backed securities lobbied Congress to prohibit "notching" – the downgrading of assets that incorporate risky, unrated assets – by their competitors, on the grounds this constituted an anti-competitive practice. Unfortunately, the Republican Congress was swayed by this argument and codified it in law.

II. Mortgage Markets: A Primer

Prospective homebuyers apply for mortgages from primary market lenders such as banks, thrifts, mortgage companies, credit unions, and online lenders. Primary lenders evaluate borrowers' ability to repay the mortgage based on an assessment of risk that combines such factors as income, assets and past performance in repaying loans. If a borrower does not meet the minimum requirement, the borrower is refused a loan.

Prime mortgages are traditionally the gold standard and go to borrowers with good credit who make down payments and fully document their income and assets. Borrowers with poor credit and/or uncertain income streams represent a higher risk of default for lenders and therefore received subprime loans. Subprime loans have existed for some time but really took off in popularity around 1995, rising from less than 5% of total new mortgages in 1994 to more than 20% in 2006.¹ Borrowers who fall in between prime and subprime standards who may not be able to fully document their income or provide traditional down payments are sometimes referred to as near-prime borrowers. They generally can apply only for Alternative-A ("Alt-A") mortgages.² Starting in 2001, subprime and near-prime mortgages increased dramatically as a proportion of the total mortgage market. These mortgages increased from only 9% of newly originated securitized mortgages in 2001 to 40% in 2006.³

Subprime borrowers, in addition to being below the standard risk threshold lenders traditionally deemed creditworthy for mortgages, were increasingly taking advantage of so-called "alternative mortgages" that further increased the risk of default. For example, low- or zero-down payment mortgages permit borrowers who cannot afford the traditional 20% down payment on a house to still receive a loan. Instead some mortgages allow them to pay 10%, 5%, or even 3% of the purchase price of the home. The riskiest loans even allow borrowers to pay no money down at all for 100% financing. Another option is to allow borrowers to take out a "piggyback" or "silent second" loan – a second mortgage to finance the down payment. This is possible because the larger first mortgage means some lenders give borrowers a more favorable rate on the second mortgage. Interest-only mortgages are another alternative type that allows borrowers to for a time pay back only interest and no principal. However, either the duration of the mortgage must be extended or the payments amortize the remaining principal balance over a shorter period of time, increasing the monthly payment, and ultimately the total size of the loan, a borrower will eventually have to repay. Negative amortization mortgages are even riskier, allowing borrowers to pay *less* than the "minimum" monthly interest payment, adding the remaining interest to the loan principal and again increasing the payments and size of the loan.⁴

¹ Barth, James R., et al., Milken Institute, Perspectives on the Subprime Market 3

² DiMartino, Danielle and John V. Duca, "The Rise and Fall of Subprime Mortgages," Insights from the Federal Reserve Bank of Dallas, Vol. 2, No. 11, Nov. 2007.

³ Tilton, Andrew, "The Subprime Slump and the Housing Market," Goldman Sachs, Feb. 23, 2007 in DiMartino and Duca.

⁴ Murphy, Edward Vincent, "Alternative Mortgages: Causes and Policy Implications of Troubled Mortgage Resets in the Subprime and Alt-A Markets," Apr. 18, 2008.

Adjustable rate mortgages (ARMs) are the most common of the alternative mortgages. ARMs offer a low introductory mortgage rate (the cost of borrowing money for a home loan; it is generally related to the underlying interest rate in the macro economy) which then adjusts in the future by an amount determined by a pre-arranged formula. There are different formulae used to determine the new mortgage rate on an ARM, but in general one can think of these new rates as being related to the performance of the U.S. economy. If interest rates go down during the introductory period of the ARM, the adjusted mortgage rate will be lower, meaning the borrower's monthly payment will go down. If interest rates go up, the borrower's monthly payment will be larger. The prevalence of ARMs as a percentage of the total mortgage market increased dramatically during the housing bubble, from 12% in 2001 to 34% in 2004.⁵

Unlike the above-mentioned alternative mortgages, however, there are sound reasons for borrowers to take out ARMs, under certain macroeconomic conditions. In 1984, for example, 61% of new conventional mortgages were ARMs.⁶ However, this was a rational response to the very high interest rates at that time. High interest rates translate into high mortgage rates (the cost of borrowing money). This meant that borrowers at that time were willing to bet that when their mortgage rates adjusted, they were likely to adjust downward due to falling interest rates. This was a sensible bet and one that turned out to be correct.

From 2001 to 2004, however, interest rates were abnormally low because the Federal Reserve led by Chairman Alan Greenspan lowered rates dramatically to pump up the U.S. economy following the attacks of September 11, 2001. Correspondingly, from 2004 to 2006, mortgage rates on 30-year fixed-rate mortgages were around 6%, relatively low by historical standards. Borrowers responding only to these macroeconomic conditions would have been wise to lock in these rates with a traditional 30-year fixed-rate mortgage. The continuing popularity of ARMs, at least until about 2004, relates in part to the abnormally wide disparity between short- and long-term interest rates during this period. Since ARMs tend to follow short-term rates, borrowers could get these mortgages at even lower costs and, as long as they were confident that housing prices would continue to rise, plan on refinancing before their ARMs adjusted upward.⁷

Low short-term rates until 2004 are only part of the puzzle, however. By 2005 short-term interest rates were actually rising faster than long-term rates, yet ARMs remained very popular. By 2006 housing prices had started to slow significantly and yet introductory periods remained popular. In the words of a report by the Congressional Research Service, "The persistence of nontraditional terms could be evidence that some borrowers intended to sell or refinance quickly – one indicator of speculative behavior." However, the report goes on to note that, in addition to speculation, "alternative mortgages were

⁵ Ibid.

⁶ Federal Housing Finance Board, "2006 Mortgage Market Statistical Annual – Vol. 1, p. 17" in Edward Vincent Murphy, "Alternative Mortgages: Causes and Policy Implications of Troubled Mortgage Resets in the Subprime and Alt-A Markets," Apr. 18, 2008.

⁷ Ibid.

marketed as affordability products to lower income and less sophisticated borrowers during the housing boom.”⁸ Some other force was clearly at work.

III. The Role of Fannie Mae and Freddie Mac in Creating the Credit Crisis

Successive Congresses and Administrations have used Fannie Mae and Freddie Mac as tools in service to a well-intentioned policy to increase the affordability of housing in the United States. In the process, the U.S. Government created an incentive structure for Fannie and Freddie to facilitate the extension of risky nonprime and alternative mortgages to many borrowers with a questionable ability to pay these loans back. Ultimately, Fannie and Freddie may have purchased or guaranteed up to \$1 trillion of risky nonprime mortgages. This, along with a healthy dose of unethical and corrupt behavior by the management of Fannie Mae and Freddie Mac, has contributed perhaps more than any other single factor to the growth of the subprime housing bubble from 2005 to 2007, which in turn was the root cause of the current financial crisis.

In the mortgage market, primary lenders may choose to hold a mortgage until repayment or they may sell it to the secondary mortgage market. If the primary lender sells the mortgage, it can use the proceeds from the sale to make additional loans to other homebuyers. This increase in the funding available to mortgage lenders to lend was the goal behind the creation of Fannie Mae and Freddie Mac.

Prior to the existence of the secondary mortgage market, there was no national U.S. mortgage market. Instead, the mortgage industry was mainly concentrated in urban centers, leaving broad swaths of the country unable to afford home financing. In response, Congress created the Federal National Mortgage Association, or Fannie Mae, in the National Housing Act of 1934 as a purely public agency. After a number of legislative iterations, Fannie Mae morphed into a private company, a “government-sponsored enterprise” (GSE), with no federal funding by 1970. Congress created the Federal Home Loan Mortgage Corporation, or Freddie Mac, in 1970 to facilitate secondary market trading of conventional mortgages, but in 1989 rechartered it to be a privately-owned corporation to fulfill the same role as Fannie Mae. That purpose was to, “provide capital to primary market mortgage originators in support of an overall federal policy to assure ready availability of financing for housing.”⁹

Congress granted Fannie and Freddie certain benefits not available to other private financial institutions. Perhaps most importantly, Fannie Mae and Freddie Mac were able to borrow at rates almost as low as the Federal interest rate, significantly lower than *de facto* non-governmental institutions because investors purchasing Fannie and Freddie’s debt believed implicitly (and rightly as it turned out) that the GSEs were backed by the full faith and credit of the U.S. Government due to their origins as government entities.¹⁰

⁸ Ibid.

⁹ Weiss, N. Eric and Michael V. Seitzinger, Congressional Research Service, “Fannie Mae and Freddie Mac: A Legal and Policy Overview,” Feb. 28, 2008.

¹⁰ Weiss and Seitzinger.

This was a critical factor in making them very competitive vis-à-vis their private sector rivals, which could not borrow money at such favorable rates. This advantage also had the effect of padding the profit margins of Fannie and Freddie, making them extremely lucrative operations.

1992 was a turning point in the history of Fannie and Freddie. In that year, Congress created a new dual oversight structure for the GSEs. However, it also developed an affordable housing “mandate” for the entities under which Fannie and Freddie were to seek to increase mortgage lending among low and moderate income borrowers. Congress was rightfully concerned that such large corporations with ambiguous ties to the Federal Government and with huge and undiversified investment in residential mortgages presented a significant risk to the American taxpayer if they ever got into financial trouble. Indeed, investors’ willingness to buy the companies’ debt at such low rates indicates they believed the Federal Government would likely bail them out if they got into trouble. Yet Congress also sought to transform Fannie and Freddie into tools of affordable housing policy.

Thus Congress created the Office of Federal Housing Enterprise Oversight (OFHEO) as an independent entity within the Department of Housing and Urban Development (HUD) to oversee the safety and soundness of the GSEs operations. Specifically, OFHEO was charged with ensuring Fannie and Freddie maintained adequate capital relative to their liabilities and with oversight of their management practices. On the other hand, HUD was charged with setting targets for Fannie and Freddie to lend to low- and moderate-income borrowers. Specifically this meant lending each year had to be meet quotas of families with incomes below the area median income. Additionally, Fannie and Freddie had to demonstrate that a certain percentage of their financing was to families with “low” or “very low” incomes and to businesses in “disadvantaged” localities. HUD would regularly adjust these mission goal targets and was required to evaluate any new initiative on the basis of its support for the affordable housing goals.¹¹

How did Fannie and Freddie go about fulfilling their affordable housing mission? First, they purchased mortgages directly and held them in their portfolio. By doing so, they removed these mortgage obligations from the books of primary lenders, whether commercial banks, thrifts, credit unions, or non-bank lenders such as Countrywide Financial. This allowed primary lenders to go about making new mortgages, increasing the availability of funds for all borrowers. The GSEs funded these purchases by issuing bonds and other debt to investors. This was extremely profitable because, as mentioned, Fannie and Freddie could issue debt very cheaply, at rates near the Federal funds rate, giving them a competitive edge over the truly private sector.

Second, Fannie and Freddie engaged in mortgage securitization. Securitization involves taking pools of mortgages and turning them into assets known as Mortgage-Backed Securities (MBS). These securities are then sold to investors such as investment banks and pension funds. They pay investors periodic returns similar to the coupon payments on a bond. MBS also often redirect the interest and principal payments of the underlying

¹¹ Ibid.

mortgages to investors.¹² When an investor purchases a MBS, he is essentially lending money to homebuyers. Securitization is an innovative technique and plays a crucial role in increasing the accessibility and affordability of mortgage lending by connecting homebuyers with the broader financial market as well as by spreading the risk of default more evenly, at least in theory.

Although securitization of mortgages is a valuable innovation, there are risks. If investors are unable to accurately assess the quality of the underlying mortgages, this increases the risk of default and lowers the value of the asset. Therefore, while many private sector, non-bank mortgage lenders were engaged in the packaging of risky nonprime and alternative mortgages into MBS, it was at least believed that Fannie Mae and Freddie Mac had higher standards. However, it now appears that, under political pressure and in pursuit of profit, Fannie Mae and Freddie Mac became increasingly involved in the packaging of risky nonprime mortgages into securities for sale. This did much to fuel the irrational housing bubble and subsequent financial crisis because, as the largest purchasers of mortgages and MBS, Fannie Mae and Freddie Mac exerted tremendous influence on the actions of private sector, non-bank lenders that were underwriting the bulk of the risky nonprime and alternative mortgages which the GSEs would then purchase and market.

Recent analysis of the financial statements of Fannie and Freddie indicates that, contrary to prior assertions by GSE management and their advocates in Congress, both firms were heavily involved in purchasing nonprime mortgages and MBS between 2005 and 2007. Specifically, Fannie Mae and Freddie Mac together apparently held or guaranteed more than \$1 trillion in unpaid principal balance on subprime and Alt-A junk mortgages.¹³ It now appears that Fannie and Freddie, which had long maintained they operated with high standards for safety and soundness when investing in mortgages, engaged in a verbal sleight of hand in order to dip so deeply into the nonprime mortgage business while maintaining the illusion that they were engaging in low-risk investments. U.S. bank regulators define “subprime” borrowers as those with “damaged credit,” to include those with a FICO score of less than 660.¹⁴ However, Fannie and Freddie lowered their bar on the definition of “subprime” and “Alt-A” to FICO scores of 620, dramatically increasing the universe of risky nonprime mortgages they could then purchase and securitize.¹⁵

Fannie and Freddie did not acquire bad mortgages by accident. Rather, the lowering of their standards for mortgage loans was a steady process drawn out over at least a decade. In 1999, under pressure from the Clinton Administration to increase home ownership rates among low and moderate income borrowers, Fannie Mae CEO Franklin Raines lowered his company’s lending standards to include, “individuals whose credit is

¹² <http://www.investopedia.com/terms/m/mbs.asp>

¹³ Wallison, Peter J. and Charles W. Calomiris, “The Last Trillion-Dollar Commitment,” American Enterprise Institute, Sept. 30, 2008.

¹⁴ Office of the Comptroller of the Currency, Federal Reserve Board, Federal Deposit Insurance Corporation, Office of Thrift Supervision, “Expanded Guidance for Subprime Lending Programs,” 2001, in Wallison and Calomiris.

¹⁵ Wallison and Calomiris

generally not good enough to qualify for conventional loans.”¹⁶ Mr. Raines clearly got the message because by 2004, in joint remarks with Freddie Mac CEO Richard Syron before the Mortgage Bankers Association, he said that they, “made no bones about their interest in buying loans made to borrowers formerly considered the province of nonprime and other niche lenders.” Raines went on to say that, “We have to push products and opportunities to people who have lesser credit quality.”¹⁷ The GSEs regulator, OFHEO, has also explicitly drawn a connection between the companies and subprime mortgage lending. In testimony before the Senate Banking Committee, OFHEO Director James Lockhart said that Fannie and Freddie purchased and guaranteed, “many more low-documentation, low-verification and non-standard” mortgages in 2006 and 2007 than in the past. He also asserted that the companies did so against the express warnings of his agency. According to Lockhart, about 33% of the GSE’s business involved such risky mortgages, up from just 14% in 2005.¹⁸ This reality did little to impinge on Raines’ assertions that his company’s investments in home mortgages were very nearly “riskless” investments, as he asserted before a Congressional hearing in 2004.¹⁹

As the largest purchasers and securitizers of mortgages and MBS in the world, Fannie Mae and Freddie Mac exert a powerful influence on the rest of the mortgage lending market. By signaling their willingness to dip ever deeper into the pool of risky subprime and Alt-A mortgages, they created powerful incentives for non-bank lenders like Countrywide Financial and Lehman Brothers to continue scraping the bottom of the mortgage barrel. This fueled the disastrous housing bubble that collapsed with such dire consequences for the U.S. and global financial system.

The motivations for Fannie Mae and Freddie Mac to gamble with taxpayer money on bad nonprime mortgage bets was not entirely a matter of good intentions gone awry, however. Greed and corruption were unfortunately part of the equation as well. The size and growth of Fannie Mae and Freddie Mac leading up to their collapse were nothing short of astonishing. From 1990 to 2005, Fannie Mae and Freddie Mac grew more than 944% to \$1.64 trillion and their outstanding liabilities grew 980% to \$1.51 trillion. These liabilities were equal to 32.8% of the total publicly-held debt of the U.S. Government, which in 2005 stood at \$4.6 trillion.²⁰

This phenomenal growth was a function of a very profitable business model that allowed Fannie and Freddie to borrow money cheaply because investors believed (rightly it turned out) that the U.S. Government would never allow the companies to fail and thus gave them low rates of lending. The executives at Fannie and Freddie then invested this

¹⁶ Holmes, Steven A. “Fannie Mae Eases Credit to Aid Mortgage Lending,” The New York Times, Sept. 30, 1999, C2.

¹⁷ Morse, Neil, “Looking for New Customers,” Mortgage Banking, Dec. 1, 2004 in Wallison and Calomiris, “The Last Trillion-Dollar Commitment”, American Enterprise Institute Financial Services Outlook, Sept. 30, 2008.

¹⁸ Goldfarb, Zachary A., “Affordable-Housing Goals Scaled Back,” The Washington Post, Sept. 24, 2008, A11.

¹⁹ Raines, Franklin Delano, testimony before the House Committee on Financial Services, Oct. 6, 2004.

²⁰ Weiss, N. Eric and Michael V. Seitzinger, “Fannie Mae and Freddie Mac: A Legal and Policy Overview,” Congressional Research Service, Feb. 28, 2008.

money in mortgages and MBS, many of which it turns out were risky nonprime loans. Thus, Fannie and Freddie executives developed a storied tradition of enriching themselves and their private shareholders at taxpayers' expense.

For example, Franklin Raines, Fannie Mae CEO (1998-2003) and former Clinton Administration Budget Director, earned over \$90 million during this period. Of that sum, over \$52 million was directly tied to achieving profitability targets. In 2003, Fannie's safety and soundness regulator, OFHEO, discovered that Raines and his management team had "manipulated accounting; reaped maximum, undeserved bonuses; and prevented the rest of the world from knowing." OFHEO found that Raines and his team had managed earnings, "to the one-hundredth of a penny to maximize their bonuses while neglecting investments in systems internal controls and risk management."²¹ Similarly, Fannie Mae Vice-Chairwoman and former Clinton Administration Justice Department official Jamie Gorelick earned over \$26 million between 1997 and 2003.

This level of executive compensation would not have been possible absent the corrupt use of improper accounting practices by executives at Fannie and Freddie that further padded their salaries and the dividends of their shareholders. In the wake of the Enron and WorldCom accounting scandals, Freddie Mac announced in January 2003 that it was preparing to issue a major revision of its prior financial statements. It turned out that Freddie Mac had been underreporting earnings on derivatives and bonds that had dramatically increased in value due to falling interest rates between 2000 and 2003. Freddie Mac's leadership chose to underreport this income because it sought to protect its image as a sound investment in a stable housing market. Freddie Mac's earnings were eventually revised upward by \$5 billion.²² Then in 2004, OFHEO announced that Fannie Mae had "deviated from generally accepted accounting principles in order to conceal losses, reduce volatility in reported earnings, present investors with an artificial picture of steadily growing profits, and to meet financial performance targets that triggered the payment of large bonuses" to its executives.²³ The Securities and Exchange Commission (SEC) conducted an independent review of OFHEO's findings and within weeks the leadership team led by Mr. Raines resigned from Fannie Mae. The company's earnings were eventually revised downward by \$6.3 billion.

Corrupt practices at Fannie Mae and Freddie Mac extended beyond internal accounting irregularities, however. There also appear to have been inappropriate links between a major private sector mortgage lender and the two GSEs as well. The now defunct Countrywide Financial Corporation was the largest private sector originator and securitizer of mortgages during the height of the housing bubble.²⁴ As such, Countrywide was in the position of being both a major competitor and a major customer of Fannie Mae and Freddie Mac. Indeed, in July 1999 Fannie Mae and Countrywide

²¹ OFHEO Report, "Fannie Mae Façade," May 23, 2006.

²² Jickling, Mark, "Accounting and Management Problems at Freddie Mac," Congressional Research Service, Nov. 7, 2007.

²³ Jickling, Mark, "Accounting Problems at Fannie Mae," Congressional Research Service, Dec. 7, 2006.

²⁴ "The Non-Agency MBS Market Hit an All-Time High," *Inside MBS & ABS*, Issue 2006, Vol. 2, Jan. 13, 2006.

entered into a “strategic agreement” under which, “Countrywide agreed to deliver a large portion of Fannie’s annual loan volume in exchange for special financing terms.”²⁵ However, this was not the only special arrangement between the two firms.

A federal grand jury in Los Angeles is currently investigating allegations that Countrywide CEO Angelo Mozilo operated a special lending unit called “Friends of Angelo,” the sole purpose of which was to provide “VIPs” Countrywide mortgages with preferential rates and lower fees, a perquisite unavailable to the general public. According to 2003 real estate records, Fannie Mae CEO Franklin Raines received a favorable rate of 5.125% on the first 10 years of a \$982,253 refinancing mortgage. Weeks later, Fannie Vice-Chairwoman Jamie Gorelick received a rate of 5% for the first 10 years of a \$960,149 refinancing. These loans were around a full point lower than the prevailing 6% mortgage rate at the time. Former Fannie Mae CEO James Johnson (1991-1998) also benefited from Mr. Mozilo’s largesse, receiving more than \$10 million in preferential loans from Countrywide.²⁶

IV. Enter Lehman Brothers and Countrywide

These sweetheart mortgages fit within a larger picture of relationships among top Democrat Party leaders with ties to the subprime mortgage lending industry. Often, the nexus of Fannie Mae, Countrywide Financial and other firms such as Lehman Brothers involved in packaging and marketing nonprime and alternative mortgages functioned as a revolving door for this mortgage-lending brain trust. For example, immediately prior to assuming his post as Fannie Mae CEO in 1991, James Johnson served as a managing director of Lehman Brothers, the now-defunct investment bank which collapsed under the weight of its bad subprime mortgage bets. After Countrywide Financial, Lehman Brothers was the second-largest marketer of mortgage backed securities during the height of the housing bubble.²⁷ Similarly, the “Friends of Angelo” program also gave a preferential mortgage to Charles Campion in 2003, who at the time was a lobbyist on the payroll of Fannie Mae and who later left to lobby for Countrywide. Perhaps most disturbingly, Countrywide also singled out Members of Congress with influence over the mortgage-lending sector. Senator Christopher Dodd, the Chairman of the Banking Committee, also is reported to have received a preferential rate of 4.25% for 5 years on a \$506,000 loan.²⁸

Certainly these questionable lobbying and business practices by leaders of Fannie Mae, Freddie Mac, Countrywide, and Lehman Brothers, can be explained in part by the greed of the individuals in question. However, why would Fannie Mae and Freddie Mac, after years of shying away from the riskiest mortgages and MBS, suddenly plunge headlong

²⁵ Simpson, Glenn R., “Countrywide Made Home Loans to Gorelick, Mudd,” The Wall Street Journal, Sept. 25, 2008.

²⁶ Ibid.

²⁷ “The Non-Agency MBS Market Hit an All-Time High,” Inside MBS & ABS, Issue 2006, Vol. 2, Jan. 13, 2006.

²⁸ Simpson.

into such bad assets in 2005? Following the accounting scandals of 2003-2004, it appears that Fannie Mae and Freddie Mac sought to stave off congressional reform efforts by doubling down on its affordable housing mission that is very popular with key allies in Congress.

Following the revelations about the use of unethical and improper accounting practices by Fannie and Freddie executives, calls for meaningful reform of the two companies became increasingly insistent. In a hearing before the Senate Banking Committee in 2004, Federal Reserve Chairman Alan Greenspan, although previously supportive of the role of Fannie and Freddie in using the innovation of mortgage securitization to provide a secondary mortgage market, expressed his grave concerns about the amount of risk these firms were starting to create for the entire financial system. He correctly identified the ability of Fannie and Freddie to borrow at cheaper rates as an implicit, anticompetitive government subsidy that padded their profit margins by as much as 50% of their total value. This gave the firms an unfair edge over the competition, allowing them to corner over 75% of all single-family home mortgages in the U.S.²⁹

By 2005, Chairman Greenspan was so concerned that he characterized the concentration of systemic risk inherent in the ever-growing portfolios of Fannie and Freddie as, “placing the total financial system of the future at a substantial risk.”³⁰ Chairman Greenspan likely had no idea at the time how soon his prophetic words would come to pass.

Republicans in the Senate Banking Committee led by Senators Hagel, Sununu, Dole, and McCain took up Chairman Greenspan’s call in 2005 by introducing reform legislation that would have created new regulatory oversight and limited the size of the portfolios of mortgages and MBS Fannie Mae and Freddie Mac are allowed to hold. While this would not have interfered with their appropriate role in providing a secondary mortgage market, it would have cut into the companies’ lucrative profit margins and the salaries and bonuses of their executives. In response, Fannie and Freddie, along with their allies in the homebuilding and realty industries, lobbied Congress hard to oppose the legislation. As a result, the GSE’s allies in Congress ensured the legislation was never brought to a vote on the Senate floor.³¹ This is incredibly significant, since it is likely that if this legislation was passed, the worst of the housing bubble would have been nipped in the bud, averting the current financial crisis.

Fannie Mae and Freddie Mac have a storied history of lobbying Members of Congress to shield them from regulatory scrutiny. Between 2000 and 2008, their employees contributed nearly \$15 million to the campaigns of dozens of Members of Congress on key committees responsible for oversight of Fannie and Freddie.³² Between 1998 and

²⁹ Greenspan, Alan, Testimony before the Senate Committee on Banking, Housing, and Urban Affairs, Feb. 24, 2004.

³⁰ Greenspan, Alan, Testimony before the House Financial Services Committee, Feb. 17, 2005.

³¹ Wallison, Peter J., “Regulating Fannie Mae and Freddie Mac: Now It Gets Serious,” American Enterprise Institute, May 2005.

³² Common Cause, “Ask Yourself Why...They Didn’t See This Coming,” Sept. 24, 2008 in Wallison and Calomiris.

2008, Fannie and Freddie combined spent nearly \$175 million lobbying Congress.³³ They not only hired lobbyists to influence Congress, they also hired lobbyists to *not* lobby against their interests. These Herculean influence peddling efforts were just part of managing what CEO Franklin Raines referred to as “political risk”, or the chance that Congress might in fact take its responsibility to protect the American taxpayers from wanton risk-taking by Fannie and Freddie seriously.

In return, Members of Congress benefited from the efforts of Fannie Mae and Freddie Mac to deliver affordable housing to key constituencies. For example, a press release from key GSE ally Senator Charles Schumer (D-NY) read, “Schumer Announces up to \$100 Million Freddie Mac Commitment to Address Fort Drum and Watertown Housing Crunch.” A follow-up informed the world that the Senator “urge[ed]” them to “step up” their efforts.³⁴ If Freddie Mac were truly a private enterprise, it would hardly need “urging” to act on a particular project.³⁵ The affordable housing mission of Fannie Mae and Freddie Mac is extremely popular with some Members of Congress. For example, at a hearing before the House Financial Services Committee to examine corrupt accounting practices at Fannie and Freddie, Members of the Committee strongly expressed their continuing commitment to providing nonprime and alternative mortgages as tools of the affordable housing policy. These were the same tools that contributed greatly to the housing bubble and financial crisis. For example, Representative Maxine Waters praised the “innovation” of “100% loans” – another term for the risky no down payment alternative mortgages described above. She also advocated that any investigation of corrupt accounting at Freddie and Fannie ought to be limited in such a way “as not to impede their affordable housing mission.”³⁶

Thus it is perhaps no coincidence that Fannie Mae and Freddie Mac delved more deeply than ever into pools of bad nonprime mortgages in 2005. It was at exactly this time that they were struggling to recover from their accounting scandals and avoid having their lucrative profits reduced by Congressional reform efforts aimed at limiting their portfolios of mortgages and MBS. Yet it was these very portfolios that, according to Alan Greenspan, presented a grave systemic risk to the global financial system. Fannie and Freddie sold their souls to curry favor with key allies in Congress, who blocked reform efforts which, if enacted, would likely have averted the current financial crisis.

V. The Challenges of Statistical Modeling for Risk Assessment

Although Fannie Mae and Freddie Mac bear tremendous responsibility for the current credit crisis, this is a complex problem with other contributing factors. One very significant problem is the difficulty investors have determining the real risk of complex

³³ Center for Responsive Politics, “Lobbying: Top Spenders,” 2008 in Wallison and Calomiris.

³⁴ Office of Senator Charles Schumer, “Schumer Announced up to \$100 Million Freddie Mac Commitment to Address Fort Drum and Watertown Housing Crunch,” Nov. 20, 2006 in Wallison and Calomiris.

³⁵ Wallison and Calomiris.

³⁶ Video footage of House Financial Services Committee hearing, accessed at <http://www.youtube.com/watch?v=hN31-nKndg8>

financial instruments such as mortgage backed securities and collateralized debt obligations. Collateralized debt obligations (CDO) are a type of mortgage backed security that creates separate pools of pass-through rates for different classes of bondholders with varying maturities known as tranches, which pay off investors in an order related to the risk level those investors were willing to pay for.³⁷

Some of the responsibility lies with the complex econometric models firms use to estimate risk. Lenders and investors rely these days on econometric models to sift large numbers of variables related to risk. These models use statistical methods to assess the likelihood of a given outcome. For example, mortgage lenders use them to rate borrowers' creditworthiness and the likelihood they will default on a given loan. Buyers and sellers of MBS, CDO, and other assets, such as Lehman Brothers, use them to estimate the underlying risk of these financial instruments. Insurance companies like AIG use them when trying to decide whether to provide insurance for mortgage-backed financial assets based on the likelihood of default.

Statistical modeling is a powerful and innovative tool that has improved the way we live our lives and do business. However, these models are only as good as the quality of their underlying assumptions and the quality of the data plugged into them. They are in essence mathematical machines – data is input and a final product comes out the other side. If the widgets inside the machine are broken, the result will be skewed. And if the inputs are of poor quality, so will be the final product. Incorrect assumptions in the structure of the model and poor data on the asset or outcome being assessed will lead to incorrect decision-making. Despite the sophistication of modern mathematical modeling, the old adage about “garbage in, garbage out” is important to remember.

One particularly egregious assumption made by many in the financial sector who relied on modeling to assess their exposure to risk was that risk itself is evenly distributed. In other words, they believed that risk resembles a coin toss, where on every flip of the coin there is a 50% chance of heads or tails. In fact, markets are incredibly complex and dynamic systems, where seemingly insignificant events in one part of the system can cause disproportionately significant consequences throughout the entire system.³⁸ The only way to control for such events in designing a statistical model is to anticipate all possible outcomes, and this is essentially impossible. Hence, an over-reliance on modeling without building in appropriate “wiggle room” is unwise. Unfortunately, very few people who use these models to do their daily business understand them completely, and when competition for business in the marketplace is fast and furious, there may seem to be little time to question underlying statistical assumptions.

Econometric modeling gave many mortgage lenders confidence to dramatically increase the volume of their nonprime lending. Former Federal Reserve Chairman Alan Greenspan has noted that, “where once more-marginal applicants would simply have been denied credit, lenders are now able to quite efficiently judge the risk posed by

³⁷ Investopedia, <http://www.investopedia.com/terms/c/cmo.asp>

³⁸ Rickards, James G., “A Mountain, Overlooked: How risk modeling failed Wall St. and Washington,” The Washington Post, Oct. 2, 2008.

individual applicants and to price that risk appropriately.” At least, this is the theory. However, Greenspan also noted there are concerns about the transparency and completeness of the data being fed into these equations, raising important questions about the ability of lenders and investors to accurately assess risk.³⁹

AIG also relied on econometric models when it was trying to decide whether to provide insurance for MBS and CDO packaged by the securities industries, including Lehman Brothers, and fed by the nonprime lending industry including Fannie Mae, Freddie Mac, and Countrywide Financial. AIG provided insurance for these assets using a derivative known as a credit default swap (CDS). Simply explained, this instrument provides its purchaser with a payment in the event that the credit asset (i.e., a MBS or CDO) being insured defaults. AIG had its own internal models, but the accuracy of these models is only as effective as the data provided by the creator of the asset AIG is thinking of insuring – and the originators are relying on their own models. This tiered system of statistical modeling was almost certainly complicated by the extremely proprietary attitude of financial firms toward their econometric models. This is an understandable response when one considers that these models are in fact complex pieces of intellectual property – designing and maintaining econometric models costs these firms a lot of money.⁴⁰ However, when viewed at an intellectual distance, piling models upon models and assumptions upon assumptions is the making of a house of cards. Former AIG CEO Robert Willumstad was likely aware of this fact, as the presence of a highlighted trade publication article submitted to the Committee discussing this very problem indicates.⁴¹

VI. Credit Rating Agencies and the Practice of “Rating Shopping”

Unfortunately, responsibility does not end with statistical modeling. Unscrupulous actors in the financial industry were able to convince Members of Congress and the SEC to insert themselves into the equation by abetting the practice of “rating shopping”. Congress’ response in the case of “rating shopping” is an example not of “under-regulation”, which the heated rhetoric of many in Congress now simplistically blame for the origin of the credit crisis. Instead, it is a case of bad regulation, produced by a Congress that all too often enshrines in law the wishes of special interests seeking their own gain before carefully considering the ramifications of its actions.

Underwriting by commercial banks and credit unions are regulated by the Federal Financial Institutions Examinations Council (FFIEC).⁴² Fannie Mae and Freddie Mac are regulated by the Office of Federal Housing Enterprise Oversight (OFHEO)⁴³. Non-

³⁹ Greenspan, Alan, Remarks at the Federal Reserve System’s Fourth Annual Community Affairs Research Conference, Washington, D.C., April 8, 2005.

⁴⁰ Document provided by AIG responsive to Committee request, bates HHOGR00014473.

⁴¹ Ibid.

⁴² The FFIEC consists of: Board of Governors of the Federal Reserve System (FRB), Federal Deposit Insurance Corporation (FDIC), National Credit Union Administration (NCUA), Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS).

⁴³ OFHEO and the Federal Housing Finance Board (FHLBoard) will be replaced by a new, unitary Federal Housing Finance Agency (FHFA) on July 30, 2009 pursuant to P.L. 110-289.

bank lenders, on the other hand, are often outside the safety and soundness guidance of federal regulators. Between 1997 and 2006, the share of mortgages securitized grew from 49.2% to 67.7%. In dollar terms this was an increase from \$423 billion to \$2 trillion. Stimulated by the demand of large purchasers of mortgages such as Fannie Mae and Freddie Mac, this growth may have facilitated more lending by institutions not subject to the regulation of federal bank examiners and lowered overall underwriting standards in the mortgage market.⁴⁴ The sheer growth potential in securitizing mortgage-backed assets demonstrated by these dollar amounts indicates there was a lot of money to be made up and down the line of this industry.

Assets that bundle these mortgages into mortgage-backed securities and collateralized debt obligations are typically rated by the big three Nationally Recognized Statistical Rating Organizations (NRSRO) – Moody’s Corporation, Standard & Poor’s, and Fitch Ratings. These firms issue credit ratings recognized by the SEC that provide a signal to potential investors as to the quality of an asset. The ratings of the NRSRO have a tremendous impact on the price an asset can fetch on the market. Typically, a top-level security will be rated by all three agencies, and the rating is generally the same. For example, top-level Aaa/AAA ratings are the same across the three NRSRO 98% of the time. However, for lower-quality assets like subprime MBS rated lower than Aaa/AAA, discrepancies among the three NRSRO may occur almost 50% of the time.⁴⁵

As a result, some firms that securitized nonprime mortgages into MBS and bundled them into CDO were engaging in “rating shopping” – shopping these assets at each of the three NRSROs in order to find the agency willing to give the asset the best possible rating. If the bundler didn’t like a particular NRSRO’s response because he deemed it “too low”, he could simply choose to have all or part of the asset rated by the agency willing to provide a favorable rating. However, not having all three NRSROs rate a given security hurts its marketability. A further layer of complexity was introduced when certain tranches of MBS not rated by all three NRSRO were unbundled or combined into another CDO, often after numerous changes in ownership of the asset. When the NRSRO that refused to rate the original security was asked to do so again, the agency would do only with the caveat that it would lower its overall rating of the total security by a few notches. This process is commonly referred to as “notching”.

In response to the “notching down” of securities by credit rating agencies seeking to protect their reputation, some in the financial sector sought to change the rules to suit their own ends. According to a paper published by the Federal Reserve Bank of Kansas City:

“Rating agencies that offered more favorable subprime MBS ratings reportedly lobbied Congress to prohibit notching, complaining that this constituted an anti-competitive practice, and arguing that the dominant players (Moody’s and S&P)

⁴⁴ Murphy, Edward Vincent, Congressional Research Service, “Securitization and Federal Regulation of Mortgages for Safety and Soundness,” Sept. 17, 2007.

⁴⁵ Calomiris, Charles W., Letter to Nancy M. Morris, Secretary, Securities and Exchange Commission, May 4, 2007.

should instead accept ratings of other agencies without adjustment when rating CDO pools.”⁴⁶

Unfortunately, the Republican Congress was swayed by this argument and codified it in law.⁴⁷ This prompted the SEC to issue regulations in 2007 prohibiting “notching”.⁴⁸ It appears that clever lobbyists sold Congress a bill of goods by marketing “anti-notching” regulations as an “anti-competitive” practice.

VII. Regulation and the Credit Crisis

Some in Congress assert that “deregulation” is to blame for the credit crisis, as if “deregulation” is a unified and simple policy prescription that has actual meaning. The words “regulation” and “deregulation” are not absolute goods and evils, nor are they meaningful policy prescriptions. Rather they are usually political cant used to describe complex policy discussions that defy such simplistic categorization. Serious students of economics and organizations understand that the key to successfully regulating markets is not to either create more or less regulation in an unthinking way. Rather, intelligently designed regulations help to *align the incentives* of actors within an organization to achieve some desired end. The organization in question can be a company, a government bureaucracy or even the U.S. economy writ large.⁴⁹ If undesired outcomes such as the collapse of credit markets occur, knee-jerk attempts to create new regulations or slash old ones are usually ill-advised and can create unforeseen and unwanted effects down the road. Instead, government needs to design smart regulations that align the incentives actors such as consumers, lenders and borrowers in the economy to achieve stable and healthy markets.

An illustrative example that relates to the credit crisis is the failure of prudential bank regulations to align the financial institutions’ incentives with those of the public. During periods of economic growth and increasing asset values, such as the housing bubble, financial leverage always goes up. Leverage is the use of various financial instruments or borrowed capital to increase the potential return on an investment.⁵⁰ Banks tend to increase their leverage during economic boom times because it is profitable, and as debt increases so do the risks to investors and the public. Fannie Mae and Freddie Mac are classic examples of this behavior, made all the worse because they were able to borrow even more money than normal because lenders believed rightly that taxpayers were on the hook if Fannie and Freddie collapsed.

⁴⁶ Calomiris, Charles W., “The Subprime Turmoil: What’s Old, What’s New, and What’s Next,” Oct. 1, 2008 (updated version provided by the author).

⁴⁷ Cf. P.L. 109-291, “Credit Rating Agency Duopoly Relief Act of 2006”.

⁴⁸ Speech by SEC Staff: Remarks Before the SEC Open Meeting: Final Rules Implementing the Credit Rating Agency Reform Act of 2006, May 27, 2007.

⁴⁹ For a comprehensive discussion of organizational theory cf. Olson, Mancur, The Logic of Collective Action, Public Goods and the Theory of Groups, Cambridge, MA: Harvard University Press, 1971.

⁵⁰ Investopedia.

Banking regulations require financial institutions to limit their asset risk per unit of capital, but writing regulations that simply mandate an appropriate level is unlikely to work for very long because it is in the interest of bankers to find ways around these requirements in pursuit of profit. For example, banks used the securitization of mortgages to avoid prudential regulations that sought to limit their exposure to risk.⁵¹ Many economists have advocated that government could improve banking regulations by imposing a minimum subordinated debt requirement as part of the capital requirement of banks.⁵²

Subordinated debt is a loan or security that ranks below other loans or securities with regard to claims on assets or earnings. In the case of default, creditors with subordinated debt are not paid out until after the senior debtholders are paid in full, making subordinated debt more risky than unsubordinated debt.⁵³ Financial institutions with a minimum subordinated debt requirement on their balance sheets would be far more cautious about securitizing risky subprime mortgages and other such assets because they would stand to lose money in the case of default.

In 1999, Senator Phil Gramm proposed creating such a minimum subordinated debt requirement to protect taxpayers from institutions such as Fannie Mae and Freddie Mac that used high leverage to turn large profits. He included a requirement in the Gramm-Leach-Bliley legislation that required the Federal Reserve Board to conduct a study of this proposal.⁵⁴ Unfortunately, following intensive lobbying by the commercial banking industry, the Clinton Administration failed to follow up on the Fed's research.⁵⁵ This is only one of many examples of possible regulatory improvements Congress could consider. Instead of simply falling back on worn-out tropes like "deregulation", Speaker Pelosi could commit to a top-down review of U.S. financial regulations, seeking to align the incentives of economic actors with the public good with smart regulations. What is not needed is a ham-handed layering of yet more ill-conceived regulations that produces unforeseen and undesirable consequences while limiting the economic growth that produces jobs and wealth.

⁵¹ Calomiris, "The Subprime Turmoil".

⁵² Shadow Financial Regulatory Committee, Reforming Bank Capital Regulation, AEI Press, 2000 in Calomiris, "The Subprime Turmoil".

⁵³ Investopedia.

⁵⁴ Cf. P.L. 106-102, Sec. 108.

⁵⁵ Calomiris, "The Subprime Turmoil".