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The Dodd-Frank Wall Street Reform and Consumer Protection Act: What Caused the Financial Crisis and Will Dodd-Frank Succeed in Preventing Future Crises?

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THE DODD–FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT: WHAT CAUSED THE FINANCIAL CRISIS AND WILL DODD–FRANK PREVENT FUTURE CRISSES?

Charles W. Murdock*

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* Professor of Law, Loyola University Chicago. I would like to thank Elizabeth Warren, Harvard University Professor, Assistant to the President of the United States, and Special Advisor to the Secretary of the Treasury on the U.S. Consumer Financial Protection Bureau, and Representative Bill Foster, member, House Financial Services Committee, for their comments. I would particularly like to express my appreciation to David Ruder, Professor of Law at Northwestern University and Former Chairman, Securities and Exchange Commission, for his many thoughtful comments.
During the summer and fall of 2008, a financial crisis exploded that threatened to plunge the world into an economic meltdown similar to, or worse than, the Great Depression of 1929 and ensuing years. The crisis was triggered by a drop in home values, which in turn triggered a cascade of mortgage defaults, particularly with regard to the subprime and Alt-A mortgages. Many of these mortgages had been rolled into various forms of mortgage-backed securities and sold to the public, including financial institutions. The crisis triggered three major pieces of legislation.

President Bush’s Secretary of Treasury, Henry Paulson, responded to the crisis by calling congressional leaders together and informing them that “[u]nless you act, the financial system of this country and the world
will melt down in a matter of days."\(^1\) Shortly thereafter, Congress enacted the Emergency Economic Stabilization Act of 2008,\(^2\) which made $700 billion available for the purchase of the toxic mortgage assets (as reflected in its acronym, TARP, or the Troubled Asset Repurchase Program) that were held by financial institutions. As borrowers defaulted, the market for mortgage-related assets dried up and plunged in value, threatening the solvency of financial institutions here and abroad. However, instead of purchasing the mortgage-related assets, Paulson used TARP to infuse capital into the banks.\(^3\)

Although not appreciated at the time, the recession started quietly in December 2007. Home prices, which had been constantly rising over time, peaked in 2006 and then began a sharp fall.\(^4\) The bottom likely has not yet been reached. Job losses began in 2007 and accelerated until January 2009, when job losses reached almost 800,000 a month\(^5\) and aggregated a total loss of about 4.5 million jobs from December 2007 to January 2009.\(^6\) To stem the recession and consequent job losses, Congress, at the urging of now-President Obama, enacted the American Recovery and Reinvestment Act of 2009,\(^7\) a $787 billion stimulus bill.

The recession was also devastating from a fiscal standpoint. From FY 2002 to 2007, budget deficits averaged about $300 billion,\(^8\) and at the end of fiscal 2007, the national debt stood at $9.01 trillion.\(^9\) This, in itself, was unsustainable. But in fiscal years 2008–2010, the annual deficits were

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$455 billion, $1.4 trillion, and $1.35 trillion, respectively, and the national debt reached $13.56 trillion, due to the increased spending mainly reflected in the above bills and the drop in revenues caused by the recession.

At the state level, the situation was arguably worse since states generally cannot fund deficits by borrowing, and the recession necessitated drastic cuts in spending. Two years after the economic meltdown, the impact continues as local governments turn off streetlights, cut back on police and fire departments, close down transit systems, return paved roads to gravel, and put schools on a four-day week. However, bank profits have now reached such a level that the big banks are seeking to increase their dividends, and the bonus pool for bank executives and key employees reaches into the billions of dollars. These are the people who arguably caused the crisis. On the other hand, unemployment recently reached 9.8%, and ordinary Americans are concerned about their personal economic prospects and the economy in general. This has caused some to comment that profits have been privatized and risk has been socialized.

TARP and the stimulus bill were reactive in nature, seeking to stem and reverse the ongoing financial and economic crisis. What was needed next was a proactive legislative response, aimed at preventing future crises. Congress responded by enacting the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank). It should be clear from the foregoing data that the United States cannot weather another financial crisis of the current magnitude for the foreseeable future. After the New Deal legislation in the 1930s, this country went almost fifty years...

10. DAVEMANUEL.COM, supra note 8.
11. TREASURY DIRECT, supra note 9.
The Dodd–Frank Wall Street Reform Act before the next crisis,\(^{18}\) the savings and loan debacle in the 1980s. This is a pattern of stability that, hopefully, Dodd–Frank can replicate. This Article will analyze Dodd–Frank from the perspective of whether it would have prevented the current crisis had it been in place at the start of the 2000s and whether its scope is sufficiently broad and rigorous to prevent other crises that are not clones of the present meltdown.

The analysis in this Article is very critical. In signing Dodd–Frank, President Obama stated that the Act will:

rein in the abuse and excess that nearly brought down our financial system. It will finally bring transparency to the kinds of complex and risky transactions that helped trigger the financial crisis . . . . And finally, because of this law, the American people will never again be asked to foot the bill for Wall Street’s mistakes. There will be no more tax-funded bailouts—period.\(^{19}\)

On the other hand, a day after President Obama signed the Bill into law, the minority leader of the House of Representatives, Congressman John Boehner, said at his weekly press briefing that:

the financial regulatory bill that the [P]resident signed this week is just another big-government power grab that will make it even harder to create jobs. It provides for permanent bailouts to President Obama’s Wall Street allies at the expense of small businesses and community banks across our country. Frankly, it’s just more of the same.\(^ {20}\)

Following up on this attitude, the week that the new Congress convened in January 2011, Representative Bachmann introduced a bill to repeal Dodd–Frank.\(^ {21}\)

Thus, there are two different perspectives upon the wisdom and efficacy of Dodd–Frank. As this Article demonstrates, Dodd–Frank clearly would prevent a financial crisis similar to the present one. However, as this Article also demonstrates, whether it will eliminate other financial crises will, in part, be a function of regulations that must be drafted and implemented.

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\(^{18}\) See David Moss, *Reversing the Null: Regulation, Deregulation, and the Power of Ideas* 3 (Harvard Bus. Sch., Working Paper No. 10-080), available at http://www.hbs.edu/research/pdfs/10-080.pdf; see also Professor Moss’ graph of the pattern of bank failures, text following note 285, infra. Professor Moss later correlated his bank failure graph with rising income equality; 1928 and 2007 were periods of the highest income inequality, followed by devastating economic downturn.


It is premature to speak of repealing Dodd-Frank. In view of the devastating impact of the current crisis, it is critical to understand how the crisis evolved, what incentives drove it, and who the responsible players were. Until these factors are understood, an intelligent assessment of the Act cannot be made.

The present call for repeal is driven by two beliefs: (1) that the Act was over-regulation and (2) that government-sponsored enterprises (GSEs), such as Fannie Mae, and the Community Reinvestment Act were responsible for the crisis. For example, the Washington Legal Foundation, a free-market advocacy group, asserted, "Our heavily regulated markets were pushed to the brink of collapse in spite of hundreds of laws and rules enforced by numerous federal and state agencies. No amount of oversight could have stopped the wreckage that resulted when ideologically-motivated politicians socialized major aspects of mortgage lending."22

Similarly, the American Enterprise Institute (AEI), a conservative think tank, laid the blame for the subprime crisis solely on the shoulders of Fannie Mae and Freddie Mac:

This *Outlook* tells the disheartening story of how the GSEs [Fannie Mae and Freddie Mac] sold out the taxpayers by taking huge risks on substandard mortgages, primarily to retain congressional support for the weak regulation and special benefits that fueled their high profits and profligate executive compensation. As if that were not enough, in the process, the GSEs' operations promoted a risky subprime mortgage binge in the United States that has caused a worldwide financial crisis.23

In a similar vein is Peter Wallison's statement, in his dissenting opinion from the Report of the Financial Crisis Inquiry Commission:

I believe that the *sine qua non* of the financial crisis was U.S. government housing policy, which led to the creation of 27 million subprime and other risky loans—half of all mortgages in the United States—which were ready to default as soon as the massive 1997-2007 housing bubble began to deflate.24

Mr. Wallison continued by also placing responsibility for the crisis on the GSEs and the Community Reinvestment Act.25

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25. See, e.g., id. at 524–32. Contrariwise, the Financial Crisis Inquiry Commission concluded that "the CRA was not a significant factor in subprime lending or the crisis. Many subprime lenders were not subject to the CRA. Research indicates only 6% of high-cost loans—a proxy for subprime loans—had any connection to the law. Loans made by CRA-regulated lenders in the neighborhoods in which they were required to lend were half as
The Dodd-Frank Wall Street Reform Act

In another sense, the ideological dispute is between consumer protection versus "big bank" protection. Representative Spencer Bachus, the incoming chairman of the House Financial Services Committee, has asserted that federal lawmakers and regulators exist to "serve the banks." However, as this Article demonstrates, it was the "big banks"—by funding the subprime lenders, buying their mortgages and securitizing them, slicing them to form CDOs and synthetic CDOs through derivatives, and leaning on the credit rating agencies to get AAA ratings for junk—that were the primary cause of the financial crisis. The problem was not over-regulation but, rather, a lack of wise regulation.

Since Dodd–Frank was a response to the worst financial crisis since the Great Depression and is aimed at preventing another such financial meltdown, it is critical to understand the real causes of the current financial crisis and the extent to which Dodd–Frank will remediate the past and provide assurance that the future will not lead to a repeat of history. In other words, we need more light and less heat on an issue this grave.

The organization of the Article is as follows: Part II is fairly dry—it deals with data. But in a financial crisis, numbers are important. Part II first deals with the incredible increase in assets under investment, which created the demand for the toxic mortgages, and then analyzes the changing characteristics of the subprime mortgages and their dramatic increase in volume and riskiness, a fact that was recognized by neither the regulators nor the financial services industry.

Part III introduces the roles of the players who drove the subprime crises, namely the borrowers, the mortgage brokers, the mortgage lenders, the GSEs (such as Fannie Mae) and the investment banks, the credit rating agencies, and the issuers of derivatives. Part IV deals with mortgage origination and looks at the incentives that motivated the borrower, the broker, and the lender. With respect to "liars' loans," it examines why brokers and lenders were either complicit with the borrower in creating false data or actually provided the false data. It also discusses the erosion in underwriting standards that was prompted by the desire to continually push earnings growth, which led to higher stock prices and increased compensation for management. It then reviews the provisions of Dodd–Frank that would have prevented the erosion in underwriting standards.

likely to default as similar loans made in the same neighborhoods by independent mortgage originators not subject to the law." FCIC REPORT, supra note 24, at xxvii.


27. A collateralized debt obligation, or CDO, is a type of security often composed of the riskier portions of mortgage-backed securities. A synthetic CDO is a CDO that holds credit default swaps that reference assets (rather than holding cash assets), allowing investors to make bets for or against those referenced assets. See FCIC REPORT, supra note 24, at 539, 543. The complexity of a CDO is described infra notes 462-68 and accompanying text.
Part V analyzes the role of the players in the securitization process: the GSEs and the investment banks. It describes how the investment banks became the dominant player in fueling the subprime crises by packaging risky loans into securities and financing the non-banks that originated most of the defective mortgages. It also details the incredible growth and concentration in the financial services industry.

The effectiveness of Dodd-Frank’s response to the investment banks is somewhat mixed. The Act provides a modest risk retention requirement of 5% so that securitizers will have some “skin in the game.”28 With respect to curbing excessive management risk taking, the Act relies upon disclosure and independent boards, neither of which has been highly effective in the past. The provisions dealing with inadequate capitalization and proprietary trading require extensive rulemaking before their impact can be known. With respect to “too big to fail,” Dodd-Frank does not deal adequately with the “too big” aspect, but it does set up a mechanism to deal with failing institutions.

Part VI deals with the credit rating agencies and how they lost their souls by valuing market share and growth over critical analysis. The impact of Dodd-Frank upon credit agencies should be very positive. It makes substantial structural and transparency changes and also clarifies that the credit rating agencies can be held accountable through private litigation, thereby undercutting the claim of such agencies that their ratings are protected by the First Amendment.

Part VII examines the role of derivatives, both in creating the crises and prolonging it. It discusses the Goldman Sachs settlement when Goldman sponsored a synthetic CDO without disclosing that the mortgages underlying the credit default swaps had in part been chosen by an investor who wanted to bet against the mortgages. The Article also asserts that credit default swaps should be prohibited because of the moral hazard and information asymmetry when a creditor, which has a due diligence obligation, buys protection from a third party. Moreover, the existence of naked default swaps magnified the impact of the subprime mortgage defaults.

The Conclusion asserts that Dodd-Frank should prevent a financial crisis in the future that mirrors the past crisis since it should markedly change lending practices. It should also put a stop to the shameful role of the credit rating agencies that went from serving as trusted analysts to wholesaling AAA ratings. However, the impact on the big banks remains to be seen. With respect to “too big to fail,” the Act fails to address adequately the “too big” issue, namely, the ever-increasing aggregation of financial power in large financial institutions, but it does create a sound mechanism to deal with systemically large institutions that may fail in the future. In addition, it does not adequately deal with the underlying issue that drives any financial crisis, management incentives that lead to exces-

sive risk-taking, nor does it reverse the increased concentration in the financial services industry.

II. THE EXTRAORDINARY INCREASE IN ASSETS UNDER INVESTMENT AND THE CHANGING NATURE OF SUBPRIME LOANS

One of the drivers of the subprime crisis was the surge in wealth experienced in many countries around the world. Between 2002 and 2007 there was a tremendous upsurge in the amount of assets available for investment by those seeking a profitable yet safe return. While assets under investment over the decades had grown to $37 trillion by 2002, these assets basically doubled between 2002 and 2007 to $73 trillion.\(^\text{29}\) The United States has historically been attractive to both domestic and foreign investment. But treasury bonds, from 2003 to 2005, ranged from a little over 1% to a little over 4%, depending upon the date and maturity.\(^\text{30}\) Investors, seeking a better but safe return, turned to real estate securities, which historically had a relatively low default rate.\(^\text{31}\)

When there is a surge of demand, the demand curve shifts upward to the right, resulting in higher prices. What is not always understood is that risk is a part of the price, and what occurred in the subprime markets as a result of the surge in demand was that the product purchased became much riskier. Mortgage originations grew modestly from 1990 until 2001; they then exploded, particularly with respect to refinancings, as indicated in the graph below.\(^\text{32}\)

**MORTGAGE ORIGINATIONS (1-4 FAMILY) $BILLION**

Data: Mortgage Bankers Association

http://mortgagestats.blogspot.com


\[^{31}\text{For example, total loans in the foreclosure process from 1990 to 2007, before the real estate bubble burst, ranged from 0.9% to 1.5%. See id. at 727.}\]

Home mortgage debt approximately doubled between 1990 and 2001; however, in the next five years between 2001 and 2006, it basically doubled again. In a sense, the pool of borrowers constituting a sound risk was depleted and was replaced by a pool of less credit-worthy risks, whether by virtue of their personal financial characteristics or the inflated value of the real estate underlying the security that they were offering.

The causes of the subprime crisis, and the responsibility therefore, cannot be understood without a perspective on the nature of subprime loans, their explosive growth, and how the risk characteristics of these loans grew riskier over time. It is important to identify the period during which this move toward greater risk took place in order to assess who were the prime contributors to the crisis and what motivated them. Hopefully, the following two pages of data analysis will not discourage the reader, since an understanding of this data is necessary to allocate the appropriate responsibility between the investment banks, on the one hand, and the government-sponsored entities, such as Fannie Mae and Freddie Mac, on the other, and to understand how management of the commercial and investment banks and the non-bank lenders was indifferent to the risk that they were undertaking.

From 2000 to 2003, fixed-rate subprime mortgages constituted about 33% of subprime mortgages, with the percentage being basically constant across time. Meanwhile, adjustable rate mortgages, which would reset to a higher interest rate after two or three years, averaged about 60%. These mortgages are sometimes described as “2/28” or “3/27” mortgages, reflecting the fact that a low teaser rate would be in effect for two or three years, and then the mortgage would reset to a much higher interest rate, often leading to defaults.

However, from 2004 to 2006, the fixed rate subprime percentage dropped to about 25%. In contrast, the adjustable rate mortgages increased to over 70% from 2004 to 2006. While the percentage change moved only modestly toward riskier investments, from a volume perspective, the dollar volume of subprime mortgages increased from $100 billion


34. U.S. Gov't Accountability Office, GAO-09-848R, Characteristics and Performance of Nonprime Mortgages 24 (2009), available at http://www.gao.gov/new.items/d09848r.pdf [hereinafter GAO REPORT]. The data in this section on the percentages of subprime and Alt-A loans is derived from Tables 2 and 3 in Enclosure I, pages 24–25. A subprime loan is one made to a borrower with a low credit score at an interest rate above that of a traditional mortgage.

35. Id.

36. A Federal Reserve Bank study found that about 70% of subprime loans were what is known as “2/28” or “3/27” loans, meaning that they have a low teaser rate for two or three years, and then reset to a much higher interest rate which can double the mortgage payment. See Kelly D. Edmiston & Roger Zalneraitis, Rising Foreclosures in the United States: A Perfect Storm, Fed. Reserve Bank of Kan. City Econ. Rev., Fourth Quarter 2007, at 127–28, available at http://www.kansascityfed.org/publicat/econrev/pdf/4q07Edmiston.pdf.
in 2000 to $600 billion in 2006, a 600% increase.\footnote{37}

What is the significance of the foregoing data? It illustrates that not only was there an explosive growth in a risky class of loans, namely subprime loans, but also that the composition of these loans was growing riskier over time, as the percentage of adjustable rate loans in the subprime class also increased.

There is a similar and even more distressing picture with respect to Alt-A loans. Alt-A loans are typically low documentation loans that were originally designed for credit-worthy, self-employed persons who could not meet the documentation requirements for traditional loan underwriting. For example, such person would not have a W-2 form from his employer to evidence his income. As discussed in the next section, these loans evolved into what became known as “liars’ loans.”

The dollar volume of Alt-A loans was only $25 billion in 2000, but increased to $400 billion in 2006,\footnote{38} an increase of 1,600%. Sparking this rise was a loosening of underwriting standards. From 2000 to 2003, the percentage of fixed-rate Alt-A loans slowly dropped from 85% to 71%.\footnote{39} However, from 2004 to 2006, the percentage of fixed-rate loans dropped markedly and was steady at about 38%.\footnote{40}

What products replaced the fixed-rate Alt-A loans? One essentially new product was what the Government Accounting Office described as payment-option ARMs,\footnote{41} which have been more colorfully described as “pick-a-pay” loans.\footnote{42} These loans comprised only about 2% of Alt-A loans from 2000 to 2003, but during 2004 to 2006, this percentage rose from 13% to 25%.\footnote{43} These loans enabled the borrower, for some fixed period, to choose how much of a payment he or she would make. Often this payment was less than the accruing interest, and the deficiency in interest payment was added to the principal. Thus, the loan would become a negative amortization loan, that is, one in which the principal owed is rising over time. Contrast this with a standard loan in which the payment not only covers interest, but also reduces the principal balance.

The pick-a-pay loan was initially designed for a sophisticated borrower who understood the risk and knew there was no Santa Claus. However, as housing prices rose, lenders began marketing this type of loan to lower-income borrowers as an “affordability” loan\footnote{44} that would enable a borrower to buy a more expensive house than the borrower could afford.

\begin{footnotesize}
\begin{itemize}
\item 37. GAO \textit{Report}, \textit{supra} note 34, at 1.
\item 38. \textit{Id.}
\item 39. \textit{Id.} at 30.
\item 40. \textit{Id.}
\item 41. \textit{Id.} at 5.
\item 42. With this type of loan, the borrower could choose a payment amount that was substantially below the accruing interest rate, with the deficiency in accrued interest added to the principal. When these loans reset, the mortgage payment could triple. \textit{See generally} Edmiston \& Zalneraitis, \textit{supra} note 36, at 127–28.
\item 43. GAO \textit{Report}, \textit{supra} note 34, at 26, tbl.5.
\item 44. \textit{Id.} at 24.
\end{itemize}
\end{footnotesize}
if the mortgage payment were determined under a standard amortized loan.

The other product that replaced the fixed-rate Alt-A loan was the adjustable rate Alt-A loan. From 2000 to 2003, the loans steadily increased from about 14% to 25%. However, they rose to over 60% from 2004 to 2006. Thus, the number of Alt-A loans increased even more explosively than the subprime loans, and, like the subprime loans, as their numbers increased, their risk characteristics also increased as more and more loans were adjustable rate or pick-a-pay loans.

If the foregoing analysis is correct, one would expect that the delinquency, default, and foreclosure rates (default rates) for loans would increase for annual cohorts of loans from 2000 to 2006 and that the loan types this Article asserts as the riskiest would have the highest default rates. That is exactly what the data has demonstrated.

The default rate for fixed-rate subprime mortgages dropped from 23% in 2000 to 11% in 2003, but then rose from 16% in 2004 to 32% in 2006. The default rate for hybrid ARMs dropped from 23% in 2000 to 13% in 2003, but then rose from 17% in 2004 to 50% in 2006. A similar pattern existed for Alt-A loans. The default rate for fixed-rate Alt-A loans was 8% in 2000 and averaged less than 5% for the next three years. From 2004 to 2006, the default rate rose from 4% to 13% to 23% for fixed-rate alt-A loans. With respect to payment-option loans, the default rate averaged less than 1% from 2000 to 2002, when they were used by sophisticated borrowers. From 2003 to 2006, the default rates increased from 4% to 8% to 22% to 37%. There was a similar pattern of increased default rates for adjustable Alt-A mortgages in 2004 to 2006, which contrasted with an average default of about 4% from 2000 to 2003.

Thus, there is a clear pattern that the default rates for annual cohorts of mortgages increased over time and particularly from 2004 to 2006. There is a second clear pattern which shows that the default rates for the riskier mortgages increased faster than the default rates for the fixed mortgages. This continued into 2007.

Thus, the critical period is 2004 to 2007. Accordingly, who were the major players involved in producing these risky mortgages, and what drove them to take such risk?

45. Id.
46. Id.
47. Id. at 35–36. The percentage used in this section for default rate is the sum of percentages for mortgages that are delinquent, that are in default, that are in the foreclosure process, and that have completed the foreclosure process. The higher default rate in 2000 is probably attributable to the bursting of the dot-com bubble. 
48. Id. at 36.
49. Id. Default rates in the period 2000–2003 are generally highest in the 2000 cohort of loans. This may be related to the dot-com bubble bursting in 2000. Banks which originated mortgages in 2000 may have found that the income and assets upon which they relied shrank when the bubble burst.
50. Id.
51. Id.
52. Id. at 40–41.
III. WHO WAS RESPONSIBLE FOR THESE RISKY LOANS, WHAT DROVE THEIR ACTIONS, AND TO WHAT EXTENT WILL THE FINANCIAL REFORM ACT PREVENT A FUTURE CRISIS?

It has already been posited that the overarching driver of the subprime crisis was the explosion in assets under investment looking for a home. However, it is difficult to assign culpability to investors when they thought they were buying securities with AAA credit ratings from rating agencies and prospectuses that did not adequately alert them to the dangers of these investments. Accordingly, Parts IV and V will examine the cast of participants involved in bringing the loan to the investor. These include the borrower, the mortgage broker, the mortgage banker, the syndicator of the security (generally either a government-sponsored enterprise or an affiliate of an investment banker), the rating agencies, and the issuers of derivatives. The Article will examine the role that each played and the incentives that drove their conduct. With a cast of characters this broad, the Financial Crisis Inquiry Commission paraphrased Shakespeare by stating, “the fault lies not in the stars, but in us.”


A. THE BORROWER: OPPORTUNIST OR VICTIM?

The borrower is often portrayed either as an unscrupulous opportunist, who sought to cash out some of the inflated value of his home or to buy a property beyond his means, or a victim of avaricious businesses who euchred her into a transaction that she did not understand. The data, often anecdotal, suggest that there is truth to both tales, as well as many situations falling on a continuum in between. There undoubtedly were borrowers who sought to game the system. On the other hand, there is no doubt that there was incredible selling pressure brought to bear upon prospective borrowers. Numerous actions by state attorneys general

53. FCIC REPORT, supra note 24, at xvii.


55. Even today, as I was writing this article, I received a text message soliciting me to refinance my mortgage. Being financially ultraconservative and risk-averse, I am an unlikely candidate.
demonstrate that many borrowers were duped or defrauded. What would induce mortgage brokers to go out into the hinterlands to find prospective mortgagors and dupe them? That is a subject for the next section. But first let us examine the incentives for borrowers to enter into risky transactions.

At one end of the spectrum, some degree of opportunism lurks in all of us. Combined with optimism, there is frequently a tendency to stretch to move up in the housing market, particularly when prices are rising and there is a fear of being left behind. When offered the so-called “2/28” or “3/27” adjustable-rate mortgage, there is a tendency to focus upon being able to afford the payment predicated upon the teaser rate, rather than the sobering reality of being able to make the principal payment when the mortgage resets. How do you deal with opportunistic optimism? There is a serious question as to whether 2/28 or 3/27 mortgages have a place in the financing system for home mortgages, at least below a certain threshold of income. This is not to suggest that there is a correlation between income and intelligence, but rather that there is a correlation between income and sophistication, namely the ability to appreciate risk. Certainly, ability to pay should be based on amortizing the mortgage at its expected reset interest rate, not some teaser rate.

Do we need more regulation here? A good case can be made that naive regulation has complicated the task of being able to decipher the economics of a proposed mortgage. As one commentator stated, “Most of us have experienced being overwhelmed and befuddled by the huge stack of documents full of confusing language in small print presented to us at a mortgage closing. These documents are the result of legal and compliance requirements, including regulatory attempts to insure disclosure.” What is needed is a one-page mortgage summary sheet, which, among other information, would give the borrower the current interest rate and mortgage payment and the maximum reset interest rate and corresponding monthly payment.

How many borrowers find the mortgage documentation to be confusing? The Milken Institute, relying on Federal Trade Commission data,


found that 87% of respondents could not identify the total upfront cost of
the loan, 51% could not identify the loan amount from the documents,
and 30% could not identify the presence and amount of a balloon pay-
ment.59 Financial regulation should not encourage pages of boilerplate
disclosure, but rather meaningful disclosure. There is often a wide gap in
sophistication between the borrower and the providers of credit. In this
context, complexity works to deceive the borrower.

But what of the borrowers who were unscrupulous opportunists? As
the subprime market developed in the mid-2000s, prospective borrowers
were encouraged to be unscrupulous by the explosion of the so-called
“liars’ loans.” These loans evolved from stated income loans, in which
the borrower did not need to document income and that made some
sense for a self-employed person,60 into “stated asset” loans, in which the
borrower need document neither income nor assets. As one lender
stated: “So I don’t really need to know what you make. I don’t need
proof. You tell me you make $200,000 a year? You make $200,000 a
year.”61 The Internet was alive with mortgage brokers and mortgage
lenders offering stated income and stated asset loans.62 For those at the
unscrupulous end of the spectrum, it is hard to conceive of a better ince-
tive to fabricate personal financial data than the broad-based solicitation
of liars’ loans.

One way to take the incentive out of lying is criminal prosecution for
fraud. Unfortunately, as the next section illustrates, it often is not clear
whether the borrower unilaterally lied, whether the borrower lied with
the explicit or tacit encouragement of the broker or lender, as illustrated
in the preceding paragraph, or whether the broker or lender itself falsi-
fied the documents. Today the business sector is overwhelmed by the
problematic consequences of liars’ loans. The criminal system has far
fewer resources and, with proof beyond a reasonable doubt required, has
little incentive to prosecute “he said, she said”—type cases.63

Looking forward, why should a financial institution ever make a loan
without verified documentation as to income and assets? Even with self-
employed persons, there should be state and federal income tax returns
and estimated tax payments on the income side. Just because it is not
possible to obtain some of the documentation that would be available to
an employee is no justification for not seeking any documentation. With

59. See JAMES R. BARTH & GLENN YAGO, DEMYSTIFYING THE MORTGAGE
MELTDOWN: WHAT IT MEANS FOR MAIN STREET, WALL STREET AND THE U.S. FINANCIAL
60. The early rationale for these loans was that some borrowers, such as self-employed
persons, could not provide income verification because of the lack of documents such as
W-2s.
61. 60 Minutes: The U.S. Mortgage Meltdown, (CBS television broadcast May 25,
2008).
62. Googling “stated income loans” produces over 2 million responses, many of which
are offering such loans.
63. See N.Y. PENAL LAW § 187 (McKinney 2008) (introducing a new Article 187,
“Residential Mortgage Fraud,” to the New York State Penal Code).
respect to assets, status as a self-employed person has no impact whatsoever on the ability to disclose assets. Moreover, disclosure of assets, such as bank accounts, may well provide correlation to income disclosure. Thus, a legislative or regulatory tightening of lending standards and a requirement of documentation would have been a simple way to eliminate liars' loans.

B. THE MORTGAGE BROKER

One of the culprits in the subprime crisis was the mortgage broker. Mortgage brokers clearly were incentivized to make loans, since the commission was paid upfront, often out of the points charged. While an honest broker might charge a commission of around 1%, unscrupulous brokers charged fees ranging up to 5% or higher. A 5% commission on a $200,000 loan would produce a fee of $10,000. Not bad for a day's work! Six-figure incomes were typical, and some brokers made upwards of $1 million a year. One mortgage research organization reported that, at the end of 2006, the average monthly volume of a mortgage broker was $1.6 million. At a 1.5% fee, this would produce a monthly income of $24,000, or $288,000 annually.

While this compensation may seem exceptional to some, salesmen are often compensated by commissions and, in some non-public companies, a salesman could make more than the CEO. The purpose of paying on a commission basis is to incentivize performance, namely, to generate sales. The problem is not compensation in the abstract, but rather whether the broker is acting ethically and whether the amount of compensation incentivizes brokers to engage in fraud, or to act in a manner antithetical to the interests of the borrower.

64. See Rick Brooks & Ruth Simon, Subprime Debacle Traps Even Very Credit-Worthy, WALL ST. J., Dec. 3, 2007, at Al ("On average, U.S. mortgage brokers collected 1.88% of the loan amount for originating a subprime loan, compared with 1.48% for conforming loans, according to Wholesale Access, a mortgage research firm.").

65. See Better Business Bureau, Beware of Predatory Practices in Home Mortgage Lending, BBB. ORG (Apr. 12, 2002), http://www.bbb.org/us/article/beware-of-predatory-practices-in-home-mortgage-lending-265 ("In the sub-prime market, there are mortgage brokers who will attempt to sell the borrower on a loan with the most fees and highest interest rate possible so that he/she will get more compensation. Some of these brokers may charge fees of 8 to 10 points. That means that on a $100,000 loan, the borrower is paying and financing an additional $8,000 to $10,000."); see also Predatory Mortgage Lending, SOCIALSERVE.COM, http://www.socialserve.com/tenant/PredatoryLending.html (last visited Sept. 1, 2011).


The term "broker" is ambiguous. When the broker tells a prospective borrower that he can get the borrower the "best" mortgage, the borrower would understand that the broker is acting for the borrower's benefit. In other words, the borrower would expect that the broker is the agent of the borrower. In such a case, the broker has fiduciary duties, including duties of full disclosure of all material aspects of the transaction as well as the compensation of the broker.\textsuperscript{69} And of course, the broker has an obligation not to deceive or defraud the borrower.\textsuperscript{70}

In response to the subprime crisis, California,\textsuperscript{71} New York, and Illinois passed laws in 2008 that would, in effect, legislatively impose fiduciary duties on mortgage brokers. In California, Governor Schwarzenegger vetoed the legislation, in part because of his concern that the legislation covered independent brokers but not employees of the lender, and in part over the ability of borrowers to obtain attorney's fees.\textsuperscript{72} However, Governor Paterson signed the New York legislation. Among other things, this legislation would require each mortgage broker to:

(a) act in the borrower's interest;
(b) act with reasonable skill, care and diligence;
(c) act in good faith and with fair dealing;
(d) not . . . charge any undisclosed compensation, directly or indirectly;
(e) clearly disclose . . . all material information . . . that might reasonably affect the rights, interests, or ability of the borrower . . . and
(f) diligently work to present the borrower with a range of loan products for which the borrower likely qualifies and which are appropriate to the borrower's existing circumstances, based on information . . . obtained in good faith by[ ] the broker.\textsuperscript{73}

The Illinois legislation, championed by Attorney General Lisa Madigan, contained similar provisions.\textsuperscript{74} It also gives borrowers a private right of action and requires verification of the borrower's reasonable ability to service the mortgage.\textsuperscript{75}

Placing a borrower in a 2/28 or 3/27 teaser loan, which could reset into

\textsuperscript{69} See Restatement (Third) of Agency § 8.01 (2011).
\textsuperscript{70} See id.
\textsuperscript{72} The first reason that Governor Schwarzenegger gave for vetoing the bill was that "its provisions will only apply to state regulated entities, as federally regulated entities will be exempt." However, the federal government does not regulate mortgage brokers. Thus, the governor must have been referring to lenders that are regulated by the federal government. But most subprime lenders were "non-banks" that were not regulated by the FDIC. Governor Arnold Schwarzenegger, Address Regarding Assembly Bill 1830 (Sept. 25, 2008), available at http://www.consumersunion.org/pdf/CA-mortgage-lending-fact-sheet.pdf.
\textsuperscript{75} Id. at 635/4–16, 5–7.
a mortgage payment that would double or more, generally would not be in the borrower's best interest, even if there were full disclosure to the borrower of the risks involved and the scope of the potential reset. Nor would steering the borrower into a subprime loan be in the borrower's best interest, when the borrower could qualify for a conventional loan. A study commissioned by The Wall Street Journal found that in 2005, 55% of the subprime borrowers had credit scores generally high enough to qualify for conventional loans with far better terms. In 2006, the proportion was even higher, namely, 61%. While there is some softness with respect to what credit score is sufficient to get conventional financing—generally over 620—during the period 2004 to 2007, about one-eighth of the subprime borrowers had credit scores over 700, clearly sufficient for conventional financing.

What drove mortgage brokers to place qualified buyers in subprime loans? Very likely, the increased commissions that are generated in the subprime market. On many subprime mortgage loans, brokers receive a kickback from the lender known as a "yield spread premium." Basically, the lender offers a wholesale rate, and the broker quotes a retail rate to the borrower, which can be a point or two higher and in some cases, substantially higher. The higher the interest rate, the more the broker gets paid. Professor Elizabeth Warren of Harvard has estimated that 85% to 90% of subprime loans involved a yield spread premium. She opined that a borrower who could qualify for a 6.5% fixed-rate, thirty-year mortgage could end up with a 9.5% variable mortgage. While this is clearly to the disadvantage of the borrower, it provides a substantial increase in compensation to the mortgage broker.

Regulation of mortgage brokers varies widely across the country. In Florida, more than 10,000 convicted criminals worked in the mortgage

77. See Brooks & Simon, supra note 64.
78. Id.
79. See id.
80. Id.
82. Brooks & Simon, supra note 64.
83. See id.
84. See id.
85. Michael Calhoun, president of the Center for Responsible Lending, which had been trying for over a decade to get regulators to outlaw yield spread premiums, analyzed the incentive for brokers to engage in this practice: "People didn’t just happen to end up in risky loans. Mortgage brokers and other people on the front lines were getting two to three times as much money to push buyers into those loans than they were into 30-year fixed-rate loans. So what do you think happened?" David Streitfeld, Fed Adopts Rules Meant to Protect Home Buyer, N.Y. TIMES, Aug. 17, 2010, at B3.
86. Warren, supra note 81.
87. See id.
business, thousands of whom were licensed brokers. One congresswoman observed that "Florida was particularly lax when it [came] to mortgage regulation," and "[s]he connected . . . the lack of oversight with state politics and the political power of developers."90

The potential to make huge sums of money motivated some mortgage brokers to falsify documentation and even create bogus transactions.91 Chicago Public Media detailed a situation in which a mortgage application was filled out by the mortgage broker and listed the borrower’s income at $16,250 a month, or almost $200,000 a year.92 The borrower’s actual income was $37,000, and he had provided the broker with his tax returns.93 The broker’s fee was $18,500.94 The borrower would have qualified for a VA loan, but instead was placed in an adjustable rate subprime loan.95 When the loan reset, the borrower’s payments increased by $2,000 a month.96

Such action should be criminal. In fact, mortgage fraud prosecutions are ongoing around the country.97 Recently, forty-one defendants were charged in Ohio in one of the largest mortgage fraud schemes in the country.98 The mastermind of the scheme allegedly pocketed $31 million through bogus mortgage loans by bringing in buyers and helping them falsify credit applications to obtain loans.99 But, as observed in the preceding section, the criminal system does not have the resources to deal with this problem.100 The goal should not be prosecution, but rather prevention. That is why it is essential to regulate mortgage brokers and lenders by requiring them to obtain documentation and verify it.

C. THE MORTGAGE LENDERS

Lenders, many of whom were non-banks, financial institutions that do not accept deposits and thus are not subject to close regulation, believed they had discovered the perfect business plan.101 As previously dis-

89. Haggman & Dolan, supra note 54.
90. Packer, supra note 88.
92. Id.
93. Id.
94. Id.
95. Id.
96. Id.
99. Id.
100. See supra text accompanying note 63.
101. Id.
cussed, and as will be discussed further in connection with the role of investment banks, there seemed to be an insatiable demand for mortgages that could be packaged as mortgage-related securities.\textsuperscript{102} Since the plan was to sell the mortgages, the lender did not worry about the creditworthiness of the borrower.

This moral hazard led to an erosion of underwriting standards. Investigations by state attorneys general have documented this laxity in due diligence and basic mortgage underwriting.\textsuperscript{103} Moreover, in testimony before the Financial Crisis Inquiry Commission, Richard Bowen, a former senior vice president and business chief underwriter for Citi Mortgage, testified that of $50 billion in prime mortgages in 2006, over 60% were defective; defective mortgages increased to over 80% of production in 2007, even though he warned management of the risk to CitiMortgage because of the representations and warranties made to investors.\textsuperscript{104} With respect to subprime mortgages, large numbers of underwriting decisions were reversed by management from “turndown” to “approved.”\textsuperscript{105}

It does not take a rocket scientist to decipher the incentive for mortgage lenders to ratchet up subprime lending to satisfy the market demand for mortgage backed securities. More loans meant more revenue, which translated into greater earnings, higher stock prices, and, of course, greater compensation for management. Coupled with this was the seeming lack of risk when loans could be packaged and sold to investors without recourse.\textsuperscript{106}

Consider Countrywide Financial, now part of Bank of America,\textsuperscript{107} a classic example of greed run amok. Set forth below is a graph of the stock prices for Countrywide Financial, one of the major mortgage lenders, from 2000 to 2008.\textsuperscript{108}

Until 2003, Countrywide primarily lent conventional 30 year fixed-rate mortgages. Mortgages for securitization were sold to the GSEs,\textsuperscript{109} as the investment banks were not major players.\textsuperscript{110} But Countrywide then got

\textsuperscript{102.} See \textit{supra} text accompanying notes 32–33.
\textsuperscript{103.} See, e.g., Complaint, Illinois v. Countrywide Fin. Corp., No. 08CH 2994 (Ill. Cir. Ct. Cook Co.); see also Final Judgment and Consent Decree, Illinois v. Countrywide Fin. Corp. No. 08CH40569, (Ill. Cir. Ct. Cook Co.); \textit{supra} note 56 and accompanying text.
\textsuperscript{104.} \textit{Subprime Lending and Securitization and Government-Sponsored Enterprises: Hearing of the Financial Crisis Inquiry Commission, 111th Cong. (2010)} (statement of Richard Bowen, former Senior Vice President, CitiMortgage, Inc.).
\textsuperscript{105.} \textit{Id.}
\textsuperscript{106.} \textit{See id.}
\textsuperscript{108.} Since Countrywide Financial is no longer publicly traded, this graph was developed from data available from Thomson Reuters’ “Datastream.” The code for Countrywide is 916036.
\textsuperscript{109.} See \textit{Subprime Lending and Securitization and Government-Sponsored Enterprises, supra} note 104; see also text accompanying notes 165–68.
\textsuperscript{110.} See \textit{infra} text accompanying note 169.
heavily into the subprime business.\textsuperscript{111} When Countrywide started producing riskier products, loan volume, revenues, earnings, and executive compensation all increased, paralleling the increase in stock prices. See the chart below.\textsuperscript{112}


<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenues</th>
<th>Net Earnings</th>
<th>Volume of Loans Originated</th>
<th>CEO Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2,073,839,000</td>
<td>374,153,000</td>
<td>68,923,000,000</td>
<td>6,476,604</td>
</tr>
<tr>
<td>2001</td>
<td>2,860,359,000</td>
<td>537,541,000</td>
<td>126,980,000,000</td>
<td>7,682,302</td>
</tr>
<tr>
<td>2002</td>
<td>4,519,466,000</td>
<td>841,779,000</td>
<td>251,901,000,000</td>
<td>11,041,852</td>
</tr>
<tr>
<td>2003</td>
<td>7,978,642,000</td>
<td>2,372,950,000</td>
<td>434,864,000,000</td>
<td>25,925,941</td>
</tr>
<tr>
<td>2004</td>
<td>8,566,627,000</td>
<td>2,197,574,000</td>
<td>363,364,000,000</td>
<td>24,642,098</td>
</tr>
<tr>
<td>2005</td>
<td>10,016,708,000</td>
<td>2,528,090,000</td>
<td>499,301,000,000</td>
<td>24,350,342</td>
</tr>
<tr>
<td>2006</td>
<td>11,417,128,000</td>
<td>2,674,846,000</td>
<td>468,172,000,000</td>
<td>51,755,223</td>
</tr>
<tr>
<td>2007</td>
<td>6,061,437,000</td>
<td>-703,538,000</td>
<td>415,634,000,000</td>
<td>10,812,297</td>
</tr>
</tbody>
</table>
The two charts above essentially demonstrate the correlations between the venture into risky lending practices, which thereby generated increased volume and earnings, and hyped the stock price and increased the compensation for Andrew Mozilo, the CEO of Countrywide.

Much of Mr. Mozilo's income was attributable to stock options.113 This form of incentive compensation is supposed to align the interests of management with that of the stockholders. However, this conventional wisdom has a fatal flaw in that it does not take into account the risk profile of the two groups. Shareholders have a sunk-economic stake in their stock investment and a risk profile that is more conservative than management's. On the one hand, when management takes on increased risk, the stockholders can gain handsomely or lose all. On the other hand, were management to be given substantial options, coupled with a million dollar salary, taking risk can pay off handsomely if gains ensue. If the loans eventually turn out badly, the executive holding options, unlike the long-term shareholder investor, has no sunk investment to lose. But, if the increased risk drives up profits in the short term, with a corresponding increase in the price of the stock, the benefit to management can be enormous, since management can exercise options and sell the stock before the bottom falls out. That is what Mr. Mozilo sought to do.114

In the case of Countrywide, the price of the stock quadrupled from 2001 to 2007.115 Mr. Mozilo sold $130 million of Countrywide in 2007.
before the market for Countrywide stock plummeted and was later charged with fraud.\textsuperscript{116} Through stock options, Mr. Mozilo could buy cheaply and sell at the peak.\textsuperscript{117} This gave him an incentive of hundreds of millions of dollars to take the risks that ultimately brought the company down.\textsuperscript{118}

Conversely, investors were not privy to the inside information Mr. Mozilo had.\textsuperscript{119} According to FOXBusiness, "Countrywide portrayed itself as underwriting mainly prime-quality mortgages, using high underwriting standards. But concealed from shareholders was the true Countrywide, an increasingly reckless lender assuming greater and greater risk."\textsuperscript{120} Mr. Mozilo’s attorney asserted that Mr. Mozilo was not aware of the problems with Countrywide's loan portfolio, but FOXBusiness released a series of his e-mails in which Mr. Mozilo recognized the "toxic" nature of the loans.\textsuperscript{121} When the stock of Countrywide plummeted, it was the investors who lost their sunk investment.

After Bank of America acquired Countrywide, it paid $8.6 billion to settle lawsuits brought by the attorneys general of eleven states based on Countrywide’s predatory lending practices.\textsuperscript{122} Apparently, one of the reasons that Governor Schwarzenegger vetoed the California legislation was that it would have imposed fiduciary duties upon mortgage brokers, but not apply to mortgage lenders.\textsuperscript{123} In point of fact, legislation is needed not just to impose fiduciary duties upon mortgage brokers but also to impose similar responsibilities upon lenders and their employees. It is equally serious for the lender to misrepresent the terms of the transaction or to induce borrowers to enter into mortgages that they cannot afford.

By way of illustration, one of the subprime lenders, Fremont Investment & Loan, was subjected to a cease-and-desist order by the FDIC that required the lender not to make mortgage loans without adequately considering a borrowers’ ability to repay the mortgage.\textsuperscript{124} In particular, the lender was enjoined from qualifying borrowers for loans with low initial payments based on an introductory rate that would expire after an initial

\footnotesize{
\textsuperscript{116} See Scannell & Emshwiller, supra note 114 ("Mr. Mozilo sold $130 million of Countrywide stock in the first half of 2007 under an executive sales plan, according to securities filings, compared with $60 million in the year-earlier period. He had modified his prearranged plan in late 2006 to accelerate the sales."). According to FOXBusiness, "Mozilo was widely criticized for selling some Countrywide stock for $140 million in profits by exercising 5.1 million options and selling the underlying shares—in 2006 and 2007, just as the mortgage market topped out." Peter Barnes & Joanna Ossinger, Countrywide Ex-CEO Angelo Mozilo Charged with Fraud, FOXBUSINESS.COM (June 4, 2009), http://www.foxbusiness.com/story/markets/countrywide-ceo-mozilo-charged-fraud/.

\textsuperscript{117} See Barnes & Ossinger, supra note 116.

\textsuperscript{118} See id.

\textsuperscript{119} See id.

\textsuperscript{120} See id. (quoting SEC Enforcement Director Robert Khuzami).

\textsuperscript{121} Id.

\textsuperscript{122} D'Souza & Emery, supra note 107.

\textsuperscript{123} See supra text accompanying note 72.

}
period without an adequate analysis of the borrower’s ability to repay the
debt at the fully-indexed rate; approving borrowers without considering
appropriate documentation and/or verification of their income; providing
borrowers with inadequate and/or confusing information; approving
loans with inadequate debt-to-income analyses that did not properly con-
sider borrowers’ ability to repay; and approving loans with loan-to-value
ratios approaching or exceeding 100 percent of the value of the
collateral.125

Subprime lenders share a similarity with mortgage brokers. Both re-
ceive substantial upfront fees, enabling them to realize income at the
front end, without waiting for the borrower to begin making mortgage
payments that would translate into interest income on an ongoing basis.
In the abstract, there is nothing wrong with a lender charging points and
other reasonable upfront fees. But the availability of upfront fees accel-
erates income to the lender and provides an incentive for the lender to be
less concerned about the creditworthiness of the borrower.

Of the top twenty-five subprime lenders in 2006-2007, only five are still
in the lending business; the large majority, like Countrywide, are now
either insolvent or have been bought out at distressed prices.126 Many of
these subprime lenders were "non-banks," that is, they did not accept
deposits.127 Accordingly, they were not regulated by the FDIC. Since
depositors were not providing the funds for these mortgage banks to
loan, their funding came in the way of lines of credit and other arrange-
ments with the major investment banks and commercial banks.128 The
role of the investment banks in funding these non-banks will be consid-
ered in a later part.

D. The Response of the Dodd–Frank Act to the Creation of
Toxic Mortgages

While critics of Dodd–Frank argue that the legislation involves govern-
mental intrusion into business and will stifle the economy, the foregoing
analysis demonstrates that we have not been able to rely upon the mort-
gage industry to determine whether a borrower has the capacity to make
the required loan payments. Liars’ loans should never have existed.
Some sort of documentation always exists; the reason it was not sought
was that brokers and lenders were indifferent as to whether the loan
would be repaid—loans were created to be sold and the originator had
"no skin in the game."

125. Id.
126. See Who’s Behind the Financial Meltdown?, CTR. FOR PUB. INTEGRITY (May 6,
CTR. FOR PUB. INTEGRITY (May 6, 2009), http://www.publicintegrity.org/investigations/econ-
omic_meltdown/articles/entry/1286.
128. See infra text accompanying notes 187–90.
Had Dodd–Frank been in place at the turn of this century, the subprime crisis probably would not have occurred. However, whether the legislation goes far enough to prevent future crises is less clear.

Title 14, subtitle B, of the Financial Reform Act creates minimum standards for residential loan mortgages by amending the Truth in Lending Act to add a new section 129C which would prohibit lenders from making a loan unless the lender (1) “makes a reasonable and good faith determination” that is (2) “based on verified and documented information” that . . . the consumer has a reasonable ability to repay the loan” including (3) “taxes, insurance (including mortgage guarantee insurance), and assessments.” Thus, in one short sentence, this new provision has three elements that could have prevented the subprime crisis had lenders utilized it in the past. While it took many players to create and prolong the crisis, stopping the origination of unsound loans would have nipped the crisis in the bud by requiring verified information that supports a reasonable belief that the customer can make the mortgage payments including not just principal and interest but also taxes, insurance, and assessments. One would think that these requirements would be a no-brainer; unfortunately, mortgage brokers and lenders were financially incentivized to ignore common sense.

The new Act also makes clear that the obligation to determine ability to pay is based upon “a payment schedule that fully amortizes the loan over the term of the loan.” In calculating the payment, the interest rate over the entire term of the loan is to be “a fixed rate equal to the fully indexed rate at the time of closing, without considering the introductory rate.” Thus, for the so-called 2/28 or 3/27 mortgages with an initial low teaser rate, the ability to pay cannot be predicated upon the initial mortgage payment, which in turn is based upon the teaser rate. As discussed earlier, it was the resetting of the teaser rate, with a resulting monthly payment that could double or triple the original payment, which led to many mortgage defaults.

In the case of interest-only loans or pick-a-pay loans with a negative amortization, there are specific provisions that require the ability to pay to be predicated upon a fully amortizing repayment schedule. Thus, the ability to repay cannot be finessed by assuming that the buyer has the option of not paying interest and just adding the interest to principal. This provision also would have barred many of the improvident loans that ultimately defaulted. Pick-a-pay loans are another financial innovation
that helped drive the economy into a financial meltdown.\textsuperscript{138}

In the case of 2/28 or 3/27 loans, which the Act defines as a “hybrid adjustable rate mortgage,” six months before the reset, the creditor or servicer of the loan must furnish the borrower with a notice that includes the basis for the reset, “a good faith estimate” of the new monthly payment, “a list of alternatives” such as refinancing or pre-foreclosure sale, and the names and contact information of consumer counseling agencies.\textsuperscript{139} This is designed to give the borrower a sufficient time frame to adjust to the higher payments or to make alternative arrangements.\textsuperscript{140}

The new legislation not only would have effectively barred many improvident loans, but also would have restricted some of the incentives that led to such loans. In particular, the new legislation would bar yield spread premium or other compensation “based on the terms of the loan (other than the amount of the principal).”\textsuperscript{141} What this basically means is that the compensation of a broker cannot be a function of inducing the customer to enter into a more expensive loan with a higher rate.\textsuperscript{142} Many subprime borrowers could have qualified for a conventional loan, but mortgage brokers put them into a more expensive loan because of the higher fees the subprime loans generated.\textsuperscript{143}

A mortgage originator is defined as a person who “takes a residential mortgage loan application,” or “assists a customer in obtaining or applying” for such a loan, or “offers or negotiates terms” of such a loan.\textsuperscript{144} Thus, the term would include both a broker and a lender.\textsuperscript{145} In general, an originator cannot steer a customer to a loan that he or she does not have the “ability to repay” or that is “predatory” in nature.\textsuperscript{146} An originator also cannot:

(i) mischaracteriz[e] the credit history of a consumer or the residential mortgage loans available to a consumer;

(ii) mischaracteriz[e] or subor[n] the mischaracterization of the appraised value of the property securing the extension of credit; or

(iii) if unable to suggest, offer, or recommend to a consumer a loan that is not more expensive than a loan for which the consumer qualifies, discourag[e] a consumer from seeking a residential mortgage loan secured by a consumer’s principal dwelling from

\begin{itemize}
  \item \textsuperscript{138} See generally Edmiston & Zalneraitis, supra note 36.
  \item \textsuperscript{139} Dodd–Frank § 1418.
  \item \textsuperscript{140} See id.
  \item \textsuperscript{141} Id. § 403; see also Press Release, Bd. of Governors of the Fed. Reserve Sys., Federal Reserve Announces Final Rules to Protect Mortgage Borrower From Unfair, Abusive, or Deceptive Lending Practices That Can Arise from Loan Originator Compensation Practices (Aug. 16, 2010), available at http://www.federalreserve.gov/newsevents/press/bcreg/20100816d.htm. On August 16, 2010, the Federal Reserve Board amended its Truth in Lending Regulations, in effect, to provide mortgage brokers cannot be compensated by both the borrower and lender, and that they cannot be compensated by quoting a higher rate to the borrower in return for what in essence was a kickback from the lender.
  \item \textsuperscript{142} See Dodd–Frank § 1403.
  \item \textsuperscript{143} See Brooks & Simon, supra note 64.
  \item \textsuperscript{144} Dodd–Frank § 1401.
  \item \textsuperscript{145} See id.
  \item \textsuperscript{146} Id. § 1402.
\end{itemize}
The Dodd-Frank Wall Street Reform Act

another mortgage originator.147

The first two restrictions are designed to preclude fraudulent transactions, while the third is designed to stop the practice of steering customers into expensive, subprime loans when they would qualify for a conventional loan.148 These provisions again should curtail loans that have been prime candidates for default. There have been numerous enforcement actions seeking to curtail the practice of inflated appraisals to justify a loan to a borrower.149

Part of the opposition to a requirement that the broker and the lender make a determination of the borrower’s ability to repay has been based upon the argument that this is a subjective issue and that the subsequent events may push what had been a “good” loan into default. There is then the concern that a prior determination would be judged by hindsight.

To remedy this, the Act introduces a safe harbor for “qualified mortgages.”150 In general, a qualified mortgage is one that does not permit negative amortization or contain a balloon payment, that is based upon verified documentation of the borrower’s ability to repay under a fully amortizing payment schedule, that takes into account forthcoming regulations relating to debt to income or other ratios, and it is a mortgage in which the fees do not exceed 3%, and the term of the loan does not ex-

147. Id.
148. See id.
149. See supra note 56.
150. A qualified mortgage is one:
   (i) for which the regular periodic payments for the loan may not
      (I) result in an increase of the principal balance or;
      (II) . . . allow the consumer to defer repayment of principal;
   (ii) . . . the terms of which do not result in a balloon payment where a
      ‘balloon payment’ is a scheduled payment, that is more than twice as
      large as the average of earlier scheduled payments;
   (iii) for which the income and financial resources relied upon to qualify the
      obligors on the loan are verified and documented;
   (iv) in the case of a fixed rate loan, for which the underwriting process is
      based on a payment schedule that fully amortizes the loan over the
      loan term and takes into account all applicable taxes, insurance, and
      assessments;
   (v) in the case of an adjustable rate loan, for which the underwriting is
      based on the maximum rate permitted under the loan during the first 5
      years, and a payment schedule that fully amortizes the loan over the
      loan term and takes into account all applicable taxes insurance, and
      assessments;
   (vi) that complies with any guidelines or regulations established by the
      Board relating to ratios of total monthly debt to monthly income or
      alternative measures of ability to pay regular expenses after payment
      of total monthly debt, taking into account the income levels of the bor-
      rower and such other factors as the Board may determine relevant . . . ;
   (vii) for which the total points and fees . . . payable in connection with the
      loan do not exceed 3 percent of the total loan amount;
   (viii) for which the term of the loan does not exceed 30 years, except as such
      term may be extended . . . such as in high-cost areas; and
   (ix) in the case of a reverse mortgage . . . a reverse mortgage which meets
      the standards for a qualified mortgage, as set by the Board in rules that
      are consistent with the purposes of this subsection.
Id. § 1412 (adding § 129C(b)(2) to the Truth in Lending Act).
ceed 30 years.\textsuperscript{151}

If the mortgage is a qualified mortgage, the lender "and any assignee" may assume that the determination of "ability to repay" has been met.\textsuperscript{152} In addition, if a qualified loan is securitized, the retention requirements of Subtitle D of Title IX are waived for the originator and the securitizer.\textsuperscript{153} This is discussed later in the Article.

From a liability perspective, Dodd-Frank provides for actual damages of up to three times the compensation "accruing to the mortgage originator in connection with the loan," together with costs and a "reasonable" attorney's fee, when there has been a violation of these provisions.\textsuperscript{154} In addition, in foreclosure proceedings, the customer can assert a violation by originator as a defense or setoff.\textsuperscript{155}

The foregoing discussion that the provisions of Dodd-Frank would have prevented the current crisis is qualified by the fact that many of the requirements are subject to or are to be implemented by regulations to be promulgated by the Federal Reserve Board or other administrative bodies.\textsuperscript{156} Thus, it is not until these regulations are promulgated that a firm determination can be made of the effectiveness of some aspects of the legislation.

The creation of the new Consumer Financial Protection Bureau should also mitigate abusive mortgage lending practices.\textsuperscript{157} The Bureau may make investigations\textsuperscript{158} and conduct hearings,\textsuperscript{159} issue cease and desist orders, and initiate litigation to prevent unfair, deceptive, or abusive practices.\textsuperscript{160} It can also prescribe rules identifying unfair, deceptive, or abusive practices.\textsuperscript{161} However, the Act stringently defines 'unfairness' as that which is likely to cause substantial, unavoidable injury to consumers that is not outweighed by countervailing benefits or competition, and defines 'abusive' as that which materially interferes with consumers' understanding or takes unreasonable advantage of a lack of consumer understanding, or the inability of the consumer to protect himself.\textsuperscript{162} These standards could be a substantial restraint on the Bureau's ability to promulgate meaningful rules curtailing unfair and abusive practices.

In view of the foregoing, Dodd-Frank is a reasoned and practical response to many of the abuses involving the customer, the broker, and the lender that led to the subprime crisis. But the subprime debacle could

\textsuperscript{151} Id.
\textsuperscript{152} Id. § 1412 (adding § 129C(b)(1) to the Truth in Lending Act).
\textsuperscript{153} Id. § 941(b).
\textsuperscript{154} Id. § 1404.
\textsuperscript{155} Id. § 1413.
\textsuperscript{156} See, e.g., id. § 1412.
\textsuperscript{157} Title X, the "Consumer Financial Protection Act of 2010," creates a new "Bureau of Consumer Financial Protection" (the Bureau) as an independent Bureau within the Federal Reserve System. See id. § 1011.
\textsuperscript{158} Id. § 1052.
\textsuperscript{159} Id. § 1053.
\textsuperscript{160} Id. §§ 1053–1055.
\textsuperscript{161} Id. § 1031.
\textsuperscript{162} Id.
not have occurred without the instrumentality of the investment bankers and others who facilitated the ability of lenders to get the loans off the books by securitizing them. While the Act responds to some of the actions of these actors, many incentives toward taking excessive risks remain and the "too big to fail" scenario may not be foreclosed for the future. These issues are addressed below.

V. THE SECURITIZATION PLAYERS: INVESTMENT BANKERS, GOVERNMENT-SPONSORED ENTITIES, AND CREDIT RATING AGENCIES

The subprime lenders would not have made the riskiest of loans if they were not able to sell them into the securitization market. Once a loan was sold, the lender could care less if the borrower could repay, since the lender had made its profit and no longer had "any skin in the game."

Subprime loans generally were sold either to Fannie Mae or Freddie Mac, sometimes referred to as government-sponsored enterprises, or to investment banks that created what are sometimes known as private-label securities (PLSs). However, investors would not have purchased these exotic securities unless the credit rating agencies, particularly Moody's, Standard & Poor's, and Fitch, provided their stamp of approval, frequently in the form of a AAA rating.\(^{163}\)

The roles of the GSEs, investment banks, and the credit rating agencies, and the incentives that drove them, are analyzed below.

A. FANNIE MAE, FREDDIE MAC, AND THE INVESTMENT BANKS—THE INCREASING ROLE OF THE INVESTMENT BANKS

There is no doubt that Fannie Mae and Freddie Mac, the dominant GSEs, committed serious errors of judgment and engaged in questionable underwriting practices in the 2004-2007 period, and that risky lending and securitization practices during this period were significant drivers of the subprime crisis.\(^ {164}\) As discussed earlier, the American Enterprise Institute laid the blame for the subprime crisis solely on the shoulders of Fannie Mae and Freddie Mac.\(^ {165}\)

Unfortunately, focusing solely upon the GSEs looks only at a small part of the picture. First of all, the GSEs do not originate loans; they guarantee or purchase loans. Second, the GSE standards for the mortgages they would buy were higher than the investment banks' standards. Finally, not only did the investment banks purchase mortgages and securitize them, but they also financed the non-banks that created many

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\(^{165}\) See supra text accompanying note 23.
of the toxic mortgages and created, bought, and sold the derivatives that exacerbated the financial meltdown. AEI failed to recognize that the investment banks were also a significant, if not major, cause of the sub-prime crisis.

Mortgage-backed securities (MBS) increased from $3.161 trillion in 2000 to $4.55 trillion in 2003, a 44% increase.\textsuperscript{166} However, from 2004 to 2007, mortgage-backed securities increased from $4.84 trillion to $7.42 trillion, an increase of over $2.5 trillion, or 53%. Overall, mortgage-backed securities increased over $4.25 trillion, or 135%, from 2000 to 2007.\textsuperscript{167}

Consider now the GSEs: Fannie Mae and Freddie Mac issued $1.88 trillion in 2000, about 60% of the total of mortgage-backed securities. This increased to $3.01 trillion in 2003, or about 66% of the total. But while the volume of mortgage-backed securities issued by these two GSEs grew steadily from $3.09 trillion in 2004 to $4.02 trillion in 2007, the impact of these GSEs dropped from 64% to 54%,\textsuperscript{168} since the private investment banks had now become significant, if not dominant, participants in this market.

Then consider the private-label securities issued by the investment banks: From 2000 to 2003, the investment banks were minor players. Private-label securities grew from $0.67 trillion in 2000 to $1.06 trillion in 2003. But from 2004 to 2007, private-label securities grew from $1.29 trillion to $2.95 trillion, an increase of almost 130%. From 2000 to 2007 private-label securities grew by an astounding 343%.\textsuperscript{169}

From a relative perspective, between 2000 and 2003, private-label securities as a percentage of the mortgage-backed securities increased modestly from 21% to 23%.\textsuperscript{170} But from 2004 to 2007, the percentage of private-label securities increased from 25% to 40%.\textsuperscript{171} However, even though the investment bankers were no longer minor players, they still were not equal to the GSEs in volume or percentage. Why then were they so significant in causing the crisis?

There are four areas of culpability for the investment banks: (1) the risky nature of the loans they securitized, (2) their financing of the sub-prime lenders, particularly the so-called “non-banks,” (3) the financial incentives provided to management, and (4) their sponsoring of derivatives. The first three are addressed below; the fourth is considered separately in a later section.

\textsuperscript{167} 1.54 Mortgage Debt Outstanding, \textsc{federalreserve.gov}, l. 55, (June 2009), http://www.federalreserve.gov/econresdata/releases/mortoutstand/current.htm.
\textsuperscript{169} 1.54 Mortgage Debt Outstanding, \textsc{federalreserve.gov}, l. 70, (June 2009), http://www.federalreserve.gov/econresdata/releases/mortoutstand/current.htm.
\textsuperscript{170} See id.
\textsuperscript{171} See id.
1. *The Risky Nature of Loans Securitized by Investment Banks*

The complicity of the investment bankers in the subprime meltdown is a function, not just of the volume of subprime loans that they securitized, but also the quality of such loans. Keith Johnson, the former president of Washington Mutual's Long Beach Mortgage, testified before the Financial Crisis Inquiry Commission that traditional lending platforms were transformed into large financial factories: "Several of these factories were originating, packaging, securitizing and selling at the rate of $1 billion a day. The quality control process failed at a variety of stages during the manufacturing, distribution and on-going servicing."172 A study by Fannie Mae on the comparative riskiness of Fannie Mae versus private-label Alt-A loans is set forth in the table below.173

<table>
<thead>
<tr>
<th>Fannie Mae Alt-A</th>
<th>Private-Label Alt-A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FICO</strong></td>
<td>718</td>
</tr>
<tr>
<td><strong>Original Loan-to-Value Ratio</strong></td>
<td>73%</td>
</tr>
<tr>
<td><strong>Combined Loan-to-Value Ratio at Origination (1)</strong></td>
<td>77%</td>
</tr>
<tr>
<td><strong>Geography</strong></td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>22%</td>
</tr>
<tr>
<td>Florida</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Product Type</strong></td>
<td></td>
</tr>
<tr>
<td>Fixed Rate</td>
<td>72%</td>
</tr>
<tr>
<td>Adjustable-Rate</td>
<td>28%</td>
</tr>
<tr>
<td>Interest-Only</td>
<td>20%</td>
</tr>
<tr>
<td>Negative-Amortizing</td>
<td>3%</td>
</tr>
<tr>
<td>Investor</td>
<td>18%</td>
</tr>
</tbody>
</table>

As of 2009, only 28% of the Fannie Mae loans were adjustable-rate loans, whereas 50% of the private-label securities loans were.174 As dis-

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174. See id.
discussed earlier, adjustable-rate loans were prime candidates for default when their teaser rates reset and the mortgage payments doubled. In addition, only 3% of the Fannie Mae loans were “pick-a-pay,” or negative amortization loans, whereas 20% of the private-label securities loans were. If a borrower cannot even pay the interest at the outset of the loan, when the loan resets to an amortization schedule at a higher interest rate, the likelihood of default obviously increases dramatically.

The anticipated higher default rate for the private-label securities underwritten by the investment banks is confirmed by the graph below.


For each cohort of loans—2005, 2006, and 2007—the default rate for the private label Alt-A loans is more than twice that of the Fannie Mae Alt-A loans. The risky loans that the investment banks were willing to securitize also had an impact on the practices of the GSEs. In 2003, Fannie Mae lost 56% of its loan-reselling business to investment bankers and other competitors. Accordingly, the next year, Daniel Mudd, the CEO of Fannie Mae, met with Angelo Mozilo, “the head of Countrywide Financial, . . . which sold more loans to Fannie than anyone else.”

176. Fannie Mae, supra note 173, at 12.
177. Id.
178. Id.
180. Id.
Mozilo "threatened to upend their partnership unless Fannie started buy-
ing Countrywide's riskier loans." Since the investment banks were
moving heavily into the securitization business, this was no idle threat.
According to anonymous sources, Mozilo told Mudd, "you're becoming
irrelevant," and added that if Fannie Mae didn't take the loans that
Mozilo was pushing, "you'll find you can lose much more."183

2. Investment Bank Financing of Subprime Lenders

Besides securitizing loans, the investment banks, together with the
large commercial banks, were a major source of financing for the sub-
prime lenders.184 In addition, the investment banks also had subprime
lending subsidiaries: "Bear Stearns owned and operated EMC Mort-
gage," while "Merrill Lynch bought First Franklin, a non-bank lender that
used only independent loan brokers who were paid on commission;"185
"BNC Mortgage Inc. was part of Lehman Brothers." However, more
significant was the fact that the investment and commercial banks funded
the operations of the non-bank subprime lenders. For example, the 10-
Q report for one of the non-bank lenders, New Century Financial Corpo-
ration, for the quarterly period ending June 30, 2006, disclosed:

We have credit facilities with Bank of America, N.A., Barclays Bank
PLC, Bear Stearns Mortgage Capital Corporation, Citigroup Global
Markets Realty Corp., Credit Suisse First Boston Mortgage Capital
LLC, Deutsche Bank Securities, Inc., IXIS Real Estate Capital Inc.
(formerly known as CDC Mortgage Capital Inc.), Morgan Stanley
Mortgage Capital Inc., UBS Real Estate Securities Inc., Goldman
Sachs Mortgage Company, State Street Bank and Trust Company and
Guaranty Bank, and we also have an asset-backed commercial
paper facility. We use these facilities to finance the actual funding of
our loan originations and purchases and to aggregate pools of mort-
gage loans pending sale through securitizations or whole loan sales.
We typically sell all of our mortgage loans within one to three
months of their funding and pay down the credit facilities with the
proceeds.188

From a dollar standpoint, there was $3 billion from two lines of credit
from Bank of America, $1 billion from Barclays, $800 million from Bear

181. Id.
182. See id.
183. Id. This conversation did not dissuade Fannie Mae from aggressively pursuing
Countrywide's business and from buying risky loans. See Gretchen Morgenson, Housing
184. Id.
185. See Perkins, supra note 67.
186. Daber & Donald, supra note 127. In addition, some of the largest commercial
banks also had the subprime lending units, including Wells Fargo, JP Morgan Chase, Ci-
tigroup, and HSBC Holdings. Id.
187. See id.
188. New Century Fin. Corp., Quarterly Report (Form 10-Q) at 67 (Aug. 9, 2006), avail-
able at http://www.sec.gov/Archives/edgar/data/1287286/00008925690600974/a22754e10vq.
.htm.
Stearns, $1.5 billion from Credit Suisse First Boston, $3 billion from Morgan Stanley, and $450 million from Goldman Sachs, as well as additional billions from other major commercial banks.\textsuperscript{189} The financial statements of New Century for this period showed $9,303,086,000 of mortgage loans held for sale and $8,786,300,000 of credit facilities on such loans.\textsuperscript{190} In other words, the investment and commercial banks were providing almost 100% financing.

3. The Financial Incentives for Investment Banks

What drove the investment banks to fund the subprime lenders and securitize their loans? It is the same incentive that drove the subprime lenders: revenues translating to earnings, leading to stock appreciation and executive compensation. For example, the stock performance of Merrill Lynch from 2003 to 2008 is not unlike that of Countrywide:\textsuperscript{191}

As illustrated by the above graph, Merrill Lynch stock had dropped into the $30s around the start of 2003. After aggressively getting into the subprime mortgage game, the stock rose into the $90s in 2007. However, Merrill Lynch stock dropped precipitously when the subprime crisis unfolded. While the Dow Jones industrial average increased about 50%}

\textsuperscript{189} Id. at 67-69.

\textsuperscript{190} Id. at 5.

\textsuperscript{191} Since Merrill Lynch is no longer publicly traded, this graph was developed from data available from Thomson Reuters' "Datastream." The code for Merrill Lynch is 922060. Cf. stock price graph for Countrywide, supra note 108.
from 2003 to 2007,192 this increase paled in comparison to that of Merrill Lynch, which increased about 200%.193

There is a similar pattern with Wall Street bonuses, as disclosed by the deputy comptroller of New York,194 which are graphed below:

![Graph showing average Wall Street bonus increase from 2001 to 2006.](image)

The average Wall Street bonus increased from $74,140 in 2001 to $99,930 in 2003. However, between 2003 and 2006, it almost doubled to $190,600.195 Funding the subprime lenders and packaging subprime mortgages into securities paid off handsomely during those years.196

Guidance by the Department of Treasury in 2010 recognized that flawed incentive compensation practices in the banking industry were factors that led to the financial crisis.197 The report opined:

Incentive compensation practices in the financial industry were one of many factors contributing to the financial crisis that began in mid-2007. Banking organizations too often rewarded employees for increasing the organization's revenue or short-term profit without adequate recognition of the risks the employees' activities posed to the organization. These practices exacerbated the risks and losses at a number of banking organizations and resulted in the misalignment of the interests of employees with the long-term well-being and safety and soundness of their organizations.198

192. See Dow Jones Industrial Average, Yahoo! Finance, http://finance.yahoo.com/echarts?s=%5EDJI#chartl0:symbol=Adji;range=my;indicator=volume;charttype=line;crosshair=on;ohlvalues=0;logscale=on;source=undefined (last visited Aug. 24, 2011).
193. See supra text and graph accompanying note 191.
195. Id.
196. See id.
198. Id.
The guidance recognized that it was important to align management incentives with the interests of shareholders. However, while this may protect the safety of the organization, such alignment may not be enough to address safety-and-soundness concerns.\textsuperscript{199}

In the previous section, it was asserted generally that stock options do not align the interests of management with those of the shareholders.\textsuperscript{200} The same lack of alignment also occurred in the banking industry. \textit{The New York Times} recently analyzed how shareholders and management would fare after Merrill Lynch’s “new” incentive plan was introduced in 2006.\textsuperscript{201} The Article stated that the incentive program “did not keep workers from taking risks that nearly sank a brokerage giant.”\textsuperscript{202} But many of the major risks were taken in the period 2004 to 2006, before the plan went into effect, so the plan cannot be blamed for the earlier risks that the employees took.\textsuperscript{203} However, it does demonstrate that the incentive program did not align the interests of managers and shareholders. The study compared a $2 million investment by private investors with a $2 million investment by company management.\textsuperscript{204} The executives would have realized a $570,000 gain on their investment, or an annualized return of 9%, whereas the private investors would have lost $1.55 million, or -45\% return on their investment.\textsuperscript{205} The top six executives would have lost money because they had a less favorable match of company contributions, but they still would have lost less than the private investors.\textsuperscript{206}

B. \textbf{The Tepid Response of Dodd–Frank to the Investment Banks}

While the provisions of Dodd–Frank should curtail the creation of toxic mortgages in the future, whether it will curtail the taking of excessive risk in other circumstances is far less clear. Management of both the mortgage banks and the investment banks were motivated to take what ultimately turned out to be excessive risk driven by the desire for short-term profits with little apparent risk because the mortgages could be sold and securitized without recourse. While the toxic mortgages were rapidly turned over, as the crisis unfolded, many of these banks were caught with toxic instruments still on their books.

\textsuperscript{199} \textit{Id.}
\textsuperscript{200} \textit{See supra} text accompanying notes 113–14.
\textsuperscript{201} \textit{See} Louise Story, \textit{In Merrill's Failed Plan, Lessons for Pay Czar}, \textit{N.Y. Times}, Oct. 8, 2009, at B1 (summarizing Merrill Lynch’s compensation plan as follows: “Tie executives' compensation to their company's stock price. Withhold big paydays for years. Claw back bonuses if things go wrong. And force risk-loving traders to gamble with their own money, not just their company's.”).
\textsuperscript{202} \textit{Id.}
\textsuperscript{204} \textit{Story, supra} note 201.
\textsuperscript{205} \textit{Id.}
\textsuperscript{206} \textit{Id.}
Most of the major subprime lenders were "non-banks," that is, they did not accept deposits, but rather were funded by loans from the commercial and investment banks.207 After the repeal of the Glass–Steagall Act, commercial and investment banking activities often resided side by side in the same institution.208 Thus, the public's deposits were put at risk, leading to the charge that the banks took excessive risk with other people's money. Because of the size and interconnectedness of the major banks, they were deemed "too big to fail."209

Putting derivatives aside for the time being, there are five issues that true financial reform needed to address: (1) the lack of accountability by operating on a no-recourse basis or, as said in the trade, having "no skin in the game"; (2) management incentive programs, which encouraged excessive risk taking in the short run without accountability should the bets turn sour in the long run; (3) undercapitalization of the major banks such that, when the toxic assets on their books dropped in value, capital was depleted, and the banks were legally, if not equitably, insolvent; (4) proprietary trading, arguably with depositors' money; and (5) size and interconnectedness of such magnitude as to give rise to "too big to fail." Let us consider each and the response of Dodd–Frank.

1. "No Skin in the Game" Versus Risk Retention

One reason mortgage banks and investment banks were so cavalier in creating and securitizing toxic mortgages is that they perceived they had no risk if the mortgage went into default since they would have sold off the risk by securitizing the mortgage. Thus the characterization: "no skin in the game." But, as the crisis has developed, investors have sought to hold the investment banks accountable based upon misrepresentation and failure to disclose the nature of the risks.210

Subtitle D of Title IX of Dodd–Frank imposes credit risk retention obligations in certain circumstances. It coordinates with Title XIV, dealing with standards for mortgages211 by eliminating risk retention requirements for qualified residential mortgages,212 and provides that the defini- 


208. The Glass–Steagall Act was adopted in 1933 to separate commercial and investment banking. It was repealed in 1999 by the Gramm–Leach–Billey Act, which was lauded at the time as a further step in the deregulation of financial institutions. See Reem Heakal, What Was the Glass–Steagall Act?, INVESTOPEDIA.COM (July 16, 2003), http://www.investopedia.com/articles/03/071603.asp (the author's positive comments about the benefits of repeal were written prior to the current financial crisis).


211. See supra text accompanying notes 129–52.

tion of qualified mortgages under Title IX cannot be broader than the definition under Title XIV. As discussed earlier, a qualified mortgage is one in which the ability to repay is based upon verified documentation and determined using a fully amortizing payment schedule, and where the mortgage meets other standards relating to the term, fees, and appropriate ratios relating to debt and income. For other asset-backed securities, regulations must establish a risk retention requirement of at least 5%, unless the originator of the loan meets standards promulgated by future regulation that indicate a low credit risk. In such circumstances, the risk retention can be less than 5%. The risk retention cannot be hedged.

The forthcoming regulations must also allocate the retained risk between the originator of the loan and the securitizer who packages loans into securities and should establish asset classes and underwriting standards for different classes of assets, such as residential mortgages, commercial mortgages, commercial loans, auto loans, and other types of assets.

The 1934 Securities Exchange Act was also amended by the Financial Reform Act to remove the exemption from registration for certain real estate transactions and to enhance the disclosure obligations of the securitizer with respect to each tranche or class of security. Such disclosure should facilitate comparison of data across securities and, at a minimum, disclose risk retention data and other appropriate data to enable investors to do due diligence. A securitizer is also required to disclose repurchase requests across all the securitizer's trusts so that investors will be able to identify mortgage originators with weak or deficient underwriting standards. Finally, the securitizer is required to perform a due diligence review of the underlying assets and to disclose the nature of such review.

All of the above is subject to implementation by rule making, and the banking agencies and SEC can adopt "exemptions, exceptions, or adjustments" for classes of institutions or assets. Since Congress was heavily lobbied to eliminate risk retention in the legislation, we can expect the regulatory agencies also to be heavily lobbied to minimize the impact of

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213. Id. § 941(b) (adding § 15G(e)(4)(C) to the 1934 Securities Exchange Act).
214. See supra text accompanying notes 150-52.
216. Id. (adding § 15G(c)(1)(B)(ii) to the 1934 Securities Exchange Act).
217. Id. (adding § 15G(c)(1)(A) to the 1934 Securities Exchange Act).
218. Id. (adding § 15G(d) to the 1934 Securities Exchange Act).
219. Id. (adding § 15G(c)(2) to the 1934 Securities Exchange Act).
220. Id. § 944(a) (deleting § 4(5) from the 1934 Securities Exchange Act).
221. Id. § 942(b) (adding § 7(c) to the 1933 Securities Act).
222. Id. § 943.
223. Id. § 945 (adding § 7(d) to the 1933 Securities Act). In January of this year, the SEC promulgated Rule 193, implementing this provision. See Review of Underlying Assets in Asset-Backed Securities Transactions, 17 C.F.R. § 230.193 (2011).
The efficacy of the above remains to be seen. The 5% standard itself is not a substantial guarantee since it can be allocated between originator and securitizer, both of which, as discussed earlier, often receive fees in excess of 5%. If the retention is allocated equally, the originator and the securitizer will each only have 2.5% of the risk. In the long run, the obligation to do due diligence and to disclose the nature of such diligence may have a more positive impact.

2. The “Tired” Solution to Executive Risk-Taking

This Article has already demonstrated that during 2004–2007, when the bulk of the toxic mortgages were originated and securitized, the earnings and stock prices of the subprime lenders and investment bankers skyrocketed. So did Wall Street bonuses and the compensation of financial executives. In effect, these persons were being highly rewarded for leading the nation into a financial crisis.

The Article has also pointed out that, contrary to conventional wisdom, stock options do not align management incentives to those of shareholders. Shareholders have a sunk investment that they can lose in the long term. Stock options provide management with the opportunity to hype the price of stock without making an investment, then to exercise the option and quickly get out if storm clouds appear on the horizon. The Act’s approach to management accountability is basically the same tired and ineffective approach that Congress and the SEC have employed for years without success: disclosure and supposedly independent compensation committees. With respect to compensation committees, the Act does give the committee the authority to engage independent legal counsel and other advisers.226 This could be significant if the compensation committee is inclined to exercise independent judgment, which, unfortunately, often it is not.227

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226. Dodd–Frank § 952(a) (adding § 10C(d) to the 1934 Securities Exchange Act).
227. The Commission on Public Trust and Private Enterprise has stated: In the area of executive compensation, the Commission shares the public’s anger over excessive compensation, especially to executives of failed or failing companies who may have garnered substantial compensation even as their companies and the retirement savings of their employees have collapsed. The additional collapse of the dot-com market and the abrupt halt of the raging bull market of the 1990s (with its unsustainable growth and unrealistic price/earnings ratios) have also contributed to an unprecedented loss of confidence in the stock market and in corporate America.


The Commission stated that its recommendations: are based on perceptions of lax board and compensation committee oversight, skewed relationships between consultants and compensation committees, failure to effectively tie compensation to long-term corporate growth and success, and excessive use of fixed-price stock options whose value re-
One positive addition to the disclosure requirements is that disclosures are now required to provide information showing "the relationship between executive compensation actually paid and that the financial performance of the issuer."²²⁸ This is an effort to introduce some rationality and accountability into executive compensation. The Act also requires disclosure of the ratio of the CEO's compensation to that of the median pay of other employees.²²⁹ This may produce some shocking results. In 2001, Business Week reported that “[o]n average, CEOs at 365 of the largest publicly traded U.S. companies earned $13.1 million last year, or 531 times what the typical hourly employee took home.”²³⁰ In the past decade, the spread is even greater, as CEO compensation has risen and employee compensation has been essentially flat.²³¹

Dodd–Frank does require financial institutions to disclose “the structure of all incentive-based compensation arrangements” (but not the actual compensation of particular individuals, although the SEC rules do require disclosure of the compensation of the top five executive of-

²²⁸ Dodd–Frank § 953(a) (adding § 14(i) to the 1934 Securities Exchange Act).
²²⁹ Id. § 953(b).
²³⁰ Eric Wahlgren, *Spreading the Yankee Way of Pay*, BLOOMBERG BUSINESSWEEK (Apr. 18, 2001), http://www.businessweek.com/careers/content/apr2001/ca20010419_812.htm (The article further reported that, for Britain, the CEO compensation ratio as a multiple of average employee compensation was only 25 and for France, only 16.).
The Dodd-Frank Wall Street Reform Act officers)\textsuperscript{232} and requires federal regulators to prescribe regulations or guidelines that prohibit an incentive provision that "encourages inappropriate risks" through "excessive compensation," or that could lead to "material financial loss."\textsuperscript{233} There is also a new requirement that companies disclose whether any employee or director is permitted to purchase financial instruments enabling the person to hedge the value of the company stock in the event of a decline in value.\textsuperscript{234} This could make executives more cautious in undertaking risk since they would not be able to hedge a drop in stock price. Note, however, that hedging is not prohibited; rather, it only must be disclosed.

The Act also adds a non-binding shareholder vote on compensation every three years.\textsuperscript{235} While these provisions are positive, what is really needed, at a minimum, is a rigorous clawback\textsuperscript{236} provision such that, when history shows that bonuses or stock options were not earned, the company can recoup the compensation paid or void the options granted.

The Act makes a token step in that direction. It provides that, when a company is required to restate its financial statements because of material non-compliance with the disclosure requirements of the securities laws, the company may recover from any current or former executive officer "who received incentive-based compensation during the 3-year period preceding the date on which the issuer is required to prepare an accounting restatement based on the erroneous data" in excess of that which would have been paid to the executive officer under the accounting

\begin{footnotes}
\item[232] Rule 14-3 of the proxy rules, which requires the proxy statement to include the information in Schedule 14A, Item 8 of which requires the information specified in Item 402 of Regulation S-K, which in turn requires disclosure of the compensation of the Principal Executive Officer, the Principal Financial Officer, and the three most highly compensated executive officers other than the foregoing. See Information To be Furnished to Security Holders, 17 C.F.R. § 214.14a-3 (2010); Item 8. Compensation of Directors and Officers, 17 C.F.R. 240.14a-101 (2010); Persons Covered, 17 C.F.R. § 229.402 (2010).
\item[233] Dodd-Frank § 956(a), (b) (emphasis added).
\item[234] Id. § 955 (adding § 14(j) to the 1934 Securities Exchange Act). A study by The New York Times disclosed that many Wall Street executives reduce the risk of the stock they received as compensation through various hedging strategies. See Eric Dash, Stock-Hedging Lets Bankers Skirt Efforts to Overhaul Pay, DEALBOOK (Feb. 6, 2011), http://dealbook.nytimes.com/2011/02/05/stock-hedging-lets-bankers-skirt-efforts-to-overhaul-pay/. While Bank of America bans all employees from hedging their company's stock, "most big banks—including JP Morgan Chase, Morgan Stanley, and Goldman Sachs—prohibit only their highest ranking executives from such transactions." Id. One Goldman investment banker avoided more than seven million dollars in losses over a four-month period. Id.
\item[235] Dodd–Frank § 951 (adding § 14A to the 1934 Securities Exchange Act).
\item[236] The Department of the Treasury gives the following explanation of a clawback: The deferral-of-payment method is sometimes referred to in the industry as a "clawback." The term "clawback" also may refer specifically to an arrangement under which an employee must return incentive compensation payments previously received by the employee (and not just deferred) if certain risk outcomes occur. Section 304 of the Sarbanes-Oxley Act of 2002 (15 U.S.C. § 7243), which applies to chief executive officers and chief financial officers of public banking organizations, is an example of this more specific type of "clawback" requirement. Guidance on Sound Compensation Policies, 75 Fed. Reg. 36,395-02, 36,409 n.13 (June 25, 2010).
\end{footnotes}
restatement.237

For this clawback to be triggered, first of all, there must be a restatement of earnings; moreover, the restatement must be predicated upon a violation of the disclosure provisions of the securities laws. Then there is the quoted material above: how far back will the clawback reach? Moreover, since this provision applies only to executive officers, it would not cover the traders whose risk-taking contributed to the crisis, but who were extraordinarily well-compensated for taking such risks.

Consider Mozilo of Countrywide. His company, under his direction, loosened underwriting standards beginning in 2003. From January 2004 until mid-2007, the stock soared, as did Mozilo’s compensation. The audit of Countrywide’s 2007 fiscal year typically would not be completed until the second quarter of 2008, or later if a restatement was required. The restatement could be issued in 2008. Would a loosening of underwriting standards compel a restatement? If not, would the restatement be required because of a violation of the securities laws? Who would have the burden of proof? What would be the period covered by the clawback? Could it reach back to 2003 or 2004? These conditions and uncertainties undercut the effectiveness of the clawback provision.

Or consider the bank bonuses that were given from late 2008 up to the enactment of the American Recovery and Reinvestment Act of 2009.238 Kenneth R. Feinberg, the Special Master for TARP Executive Compensation (sometimes referred to as the “Pay Czar”), analyzed $1.7 billion of compensation paid to bank executives who made more than $500,000 per year.239 Many of these banks had received billions of dollars of payments to keep them afloat from the $700 billion bailout fund.240 According to press reports, Mr. Feinberg found that 80% of the compensation was unmerited.241 Even though these bonuses, in many instances, were given to the players who helped cause the economic crisis, Mr. Feinberg determined that the payments were legal.242

Mr. Feinberg recommended that the compensation committee of a company’s board of directors should have the authority to restructure, reduce, or cancel pending payments to executives if the company’s board of directors has identified that the company is in a crisis situation.243 This

237. Dodd–Frank § 954 (adding § 10D (b) to the 1934 Securities Exchange Act).
243. Id.
authority would supersede any rights and entitlements executives would otherwise have. But, as discussed above, this places considerable faith in compensation committees. There is concern that this leaves too much discretion with the company.

What is needed is a legislative fix that would require that incentive compensation earned in any year vests in 20% increments over five years, and that stock obtained through the exercise of stock options is similarly alienable only in 20% annual increments. If it were discovered that the compensation was not really earned, the company would be able to void the unexercised portion of the option or cancel the stock still held by the executive, among other remedies. This would convert the horizon of the executives or other employees into a long-term one. While this could be done on an ad hoc basis by the compensation committees, there could be a reluctance to do this out of concern that other companies would use their weaker constraints as a recruiting tool.

The guidance of the federal banking regulators recognized that the deferral is one method to make compensation more sensitive to risk. Deferral means:

The actual payout of an award to an employee is delayed significantly beyond the end of the performance period, and the amounts paid are adjusted for actual losses or other aspects of performance that are realized or become better known only during the deferral period. Deferred payouts may be altered according to risk outcomes either formulaically or judgmentally, subject to appropriate oversight. To be most effective, the deferral period should be sufficiently long to allow for the realization of a substantial portion of the risks from employee activities, and the measures of loss should be clearly explained to employees and closely tied to their activities during the relevant performance period.

Paradoxically, a recent study by the Council of Institutional Investors that compared the Wall Street banks to the Fortune 50 companies found that the Wall Street banks had long restriction periods that applied to much of equity compensation and that such pay practices, which entail substantial exposure to stock price volatility, should have prevented senior executives from taking excessive risks with shareowners' money. However, the study also found that weak clawbacks, excessively high levels of compensation, and lack of correlation with long-term performance offset the effect of long deferral periods:

244. Id.
In sum, the lack of long-term performance measurement on Wall Street and high absolute levels of compensation likely helped to fuel excessive risk-taking. Large amounts of compensation were delivered without restrictions and based on short-term performance. Such payouts were partly a legacy of the banks' origins as partnerships—but without the moderating element of partner-ownership.248

The median compensation for Wall Street CEOs was $30,460,451, while the median compensation for the Fortune 50 CEOs was $11,835,175.249 The study also found that the forfeiture and clawback provisions for the Wall Street executives were less stringent than those of their European counterparts.250

Another study in 2010, focusing upon Bear Stearns and Lehman Brothers, explains why retention alone does not prevent excessive risk taking by management:

As to shares, Bear Stearns and Lehman did have substantial limitations on unloading, which was permitted only five years after vesting. With such limitations, executives who are in their first or second year of their service would not attach any weight to short-term prices. However, when a firm's top executives serve for many years, as was largely the case with Bear Stearns and Lehman's executives, such arrangements will not prevent executives who have served the company for a long time (and who consequently have some awarded shares they are free to unload) from placing a significant weight on short-term [sic] prices.251

The study concluded that "[t]he executives' regular cashing out of equity incentives provided them with incentives to attach weight to short-term results."252

A broader study of fourteen major financial institutions supported the previously-discussed analysis and reported:

As a group these CEOs bought shares of their respective banks 73 times during 2000–2008, but sold their shares 2,048 times during the same period. In dollar terms, they purchased shares worth $36 million but sold shares worth $3,467 million during 2000–2008. In addition, CEOs acquired stock by exercising options 470 times during the 2000–2008 period at a total cost of $1,660 million. Because they typically paired these option exercises with open market sales, they did not necessarily invest $1,660 million of (pre-sale) cash to acquire these shares.253

248. Id. at 2.
249. Id. at 6.
250. Id. at 18.
252. Id.
A similar approach, clawbacks, forfeitures, and tie-in to long term performance, should be taken with regard to traders. If a trader wins in odd years but loses big in even years, there is no benefit to the company, but the risk-taking trader could be handsomely rewarded. It would be preferable if issues such as these could be left to the boards of directors and their compensation committees, but, as discussed above, a board could be concerned about executive and employee retention if its standards were more stringent than the norm. Since directors frequently are executives of other companies, they also have a structural bias in favor of excessive compensation and weak accountability.

3. Inadequate Capitalization

One of the reasons some financial institutions were in jeopardy was that they had inadequate capital. If capital is inadequate, a drop in the value of the assets an institution holds could render it insolvent. This is illustrated by the simple illustration below, where a bank holds mortgages supposedly worth 90:

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgages 90</td>
<td>Debt (Deposits) 80</td>
</tr>
<tr>
<td>Cash 10</td>
<td>Capital 20</td>
</tr>
<tr>
<td>Total 100</td>
<td>Total 100</td>
</tr>
</tbody>
</table>

But what if those mortgages are only worth 70 instead of 90?

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgages 70</td>
<td>Debt (deposits) 80</td>
</tr>
<tr>
<td>Cash 10</td>
<td>Capital 0</td>
</tr>
<tr>
<td>Total 80</td>
<td>Total 80</td>
</tr>
</tbody>
</table>

At this point, the bank has no capital.

This is essentially what happened in the current financial crisis. As the value of real estate dropped, so did the value of the mortgage-backed securities and collateralized debt obligations. In effect, assets disappeared from the bank’s balance sheet, leaving capital impaired. During the 2000s, the ratio of total assets to capital for Merrill Lynch and Morgan Stanley went from 19:1 and 22:1, respectively, in 2000, to 32:1 and 33:1 in

254. Guidance on Sound Incentive Compensation Policies, 75 Fed. Reg. 36,395–02, 36,407 (final guidance June 25, 2010) (giving the example of “individual employees, including non-executive employees, whose activities may expose the organization to material amounts of risk (e.g., traders with large position limits relative to the organization’s overall risk tolerance”).

Additionally, Bear Stearns's 2007 ratio was even higher at 34:1, while Lehman Brothers was 31:1.\textsuperscript{257} This undercapitalization was facilitated by the SEC, which, in 2004, modified the net capital rules for brokers to enable five major firms to about double their leverage.\textsuperscript{258}

When a firm's leverage ratio is in the mid-thirties, a 3% drop in the value of assets could impair its capital. The relationship between the leverage ratio and drop in the value of the assets necessary to wipe out a bank's capital is illustrated by the graph below:\textsuperscript{259}

\begin{center}
\textbf{DECLINE IN ASSETS THAT WILL WIPE YOU OUT AT DIFFERENT LEVELS OF LEVERAGE}
\end{center}

\begin{center}
\includegraphics[width=0.8\textwidth]{figure.png}
\end{center}

In addition, banks have sought to reduce the capital they needed to employ by a variety of techniques, as discussed below. Why is it that the banks wanted to end-run capital requirements? In the old days, referencing the simplified balance sheet above, a bank's mortgage assets would be supported by the deposits of the public and the capital provided by shareholders; the bank's income would result from the spread between the interest it received from the mortgages and the interest it was required to pay on its deposits.

\textsuperscript{256} See Barth & Yago, supra note 59; see also The Meeting behind the U.S. Banking Crisis, boom2bust.com (Nov. 11, 2008), http://web.archive.org/web/20090218181110/http:/www.boom2bust.com/2008/11/11/the-meeting-that-caused-so-much-financial-chaos/.

\textsuperscript{257} Barth & Yago, supra note 59.


pay depositors. But if the bank were required to hold only half the capital, the return on capital would roughly double in contrast with the simple model above.

Under the Basel II Accord, banks were to have an 8% capital buffer against their risk-adjusted assets. This was adjusted to 10% in the United States in order for a bank to be “well capitalized.” This would seem to indicate a 10:1 asset/equity ratio, or a 9:1 debt/equity ratio. However, the key is the phrase “risk-adjusted assets.” AAA-rated securities supposedly had half the risk of mortgages and thus required only half the capital. This was the driving force for banks holding billions of dollars of AAA-rated CDOs, which, as events unfolded, were not so riskless.

Another technique to end-run capital requirements was to sell the mortgage loans or CDOs to a structured investment vehicle (SIV). The SIV would fund the purchase with asset-backed commercial paper, which would carry a low interest rate and thus provide an arbitrage profit for the bank. However, the bank had to provide a guarantee to the buyers. Since the guarantees were short-term, but were rolled over, the bank was able to end-run the Basel capital requirements. Thus, the assets were supposedly off the balance sheet of the bank for regulatory purposes, but the bank still had the liability therefor.

A third technique to end-run regulatory capital requirements was to issue something called trust-preferred securities. The securities are a hybrid of a debt security issued by a bank to a trust or subsidiary it creates and a preferred stock issued by the trust. The bank seeks to deduct the interest paid on the debt for tax purposes, but can count the debt as capital for regulatory purposes since it is subordinate to all other debt. As

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263. A structured investment vehicle is a leveraged special purpose vehicle, funded through medium-term notes and asset-backed commercial paper, that invested in highly rated securities. A special purpose vehicle is an entity that is created to fulfill a narrow or temporary objective; typically holds a portfolio of assets such as mortgage-backed securities or other debt obligations; often used because of regulatory and bankruptcy advantages. See FCIC Report, supra note 24, at 543.


265. Id.

266. Id.

267. Id.


269. Id. at 26–27.
of 2007, there were about $160 billion of such securities outstanding.\textsuperscript{270} Today, many trust-preferred securities are trading at a fraction of their issue price.\textsuperscript{271} While major banks, such as Citicorp,\textsuperscript{272} issued billions of dollars in such securities between 2000 and 2008, more than 1,500 small and regional banks issued about $50 billion.\textsuperscript{273}

If capital inadequacy is to be addressed, so also must the end-runs which have enabled banks to hide capital inadequacy.

The response of Dodd–Frank once again was basically to punt to the regulators. Section 171 of the Act provides that the appropriate federal banking agencies shall establish “minimum leverage capital requirements”\textsuperscript{274} (the numerator of which includes the regulatory capital components and denominator of which includes the average total assets)\textsuperscript{275} and “minimum risk-based capital requirements.”\textsuperscript{276} These cannot be less than the “generally applicable” requirements, which are tied into the regulation of insured depository institutions “under the prompt corrective action regulations implementing section 38 of the Federal Deposit Insurance Act.”\textsuperscript{277}

While the legislation leaves most of the determinations to the regulators, since trust-preferred securities have not been counted as capital for depositary institutions, in effect this precludes the use in the future of trust-preferred securities as capital. However, since Senator Susan Collins was concerned about smaller banking institutions and wanted to level the playing field for smaller banks,\textsuperscript{278} the Act as agreed to in conference provided that small bank holding companies, i.e., those with less than $500 million of assets, would still be permitted to continue using these securities and having them count as tier 1 capital; it also grandfathered securities issued before May 19, 2010, for bank holding companies with less than $15 billion of assets and provided a three-year phase-in period for larger bank holding companies.\textsuperscript{279}

The foregoing was not an entirely satisfactory solution for many who were concerned with the failure of federal regulators to arrest excessive leverage in the past. Representative Speier sought to include a measure

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{270} Bill Sammon, \textit{Raising Capital Via Trust Preferred Securities}, \textit{INDEP. BANKER}, Mar. 2008, at 104.
\item \textsuperscript{271} Andrew Bary, \textit{It Only Looks like a Wipeout}, BARRON'S (Feb. 9, 2009), http://online.barrons.com/article/SB123397130260259379.html.
\item \textsuperscript{272} Id.
\item \textsuperscript{273} Robin Sidel, \textit{Big Problem for Small Banks: Trust-Preferred}, \textit{MARKETWATCH} (Feb. 11, 2010), http://www.marketwatch.com/story/small-banks-big-problems-trust-preferreds-2010-02-11-184400.
\item \textsuperscript{274} Dodd–Frank, Pub. L. No. 111-203, § 171(b0(1), 124 Stat. 1376, 1436 (2010).
\item \textsuperscript{275} Id. § 171 (a)(1)(B).
\item \textsuperscript{276} Id. § 171 (b)(2).
\item \textsuperscript{277} Id. § 171 (a)(1)(A) & (a)(2)(A).
\item \textsuperscript{278} Clarity on the Collins Amendment, \textit{INDEP. BANKERS ASSOC. OF TEX.} (May 24, 2010), http://www.ibat.org/news/2010/05/24/clarity-collins-amendment.
\item \textsuperscript{279} Dodd–Frank § 171 (b)(4), (5).
\end{itemize}
\end{footnotesize}
that would have capped leverage at large financial institutions at 15:1. She stated, "high leverage has been shown to have been one of the best predictors of major financial firms’ falling into distress or needing government support during the current crisis. I believe that it is a mistake to leave all discretion in how to accomplish that task to the primary regulators." Nevertheless, the basic issue of adequate capital for financial institutions has been left to the regulators.

4. Proprietary Trading and the Volcker Rule

Paul Krugman, a Nobel Prize-winning economist, has opined that commercial banking ought to be boring. And so it was, from 1933 when the Glass–Steagall Act was passed until 1980 when President Reagan opined that "government is not the solution; government is the problem," and began deregulating the financial industry. This resulted in the savings and loan crisis of the 1980s. The pattern of bank failures is reflected in the graph below.

BANK FAILURES AND SUSPENSIONS, 1864-2009
(with data on deposits starting in 1921)

281. Id.
In the 1990s, President Clinton, at the urging of Chairman Greenspan, Secretary of the Treasury Rubin, and his deputy, Lawrence Summers, accomplished the repeal of Glass-Steagall\textsuperscript{286} and thwarted efforts by Brooksley Born, the chair of the Commodities Futures Trading Commission, to regulate derivatives.\textsuperscript{287} This was a major contributor to the current financial crisis.

While it has proved profitable in the short run, the marriage of commercial banking and investment banking is actually a marriage made in hell. There are two entirely different risk profiles associated with the two types of banking. Commercial banking ought to be conservative or, as Mr. Krugman suggests, boring, with a focus on lending and protecting the safety of the public’s deposits.\textsuperscript{288} One reason that collateralized loan obligations (CLOs) have not had the default history of the CDOs is that the loans undergirding the former were made to businesses with whom the commercial lender typically had a long-standing relationship, the commercial lender did due diligence, and the lender kept a piece of the action. On the other hand, CDOs typically involved residential mortgage loans made by a non-bank lender with no relationship to the borrower, who cared less about the underlying safety of the loan, and who sold it to get rid of the risk. CLOs represented appropriate risk; CDOs represented excessive risk.

When commercial banks (and non-banks) adopted the risk-taking instincts of the investment bankers, they lost their compasses, failed to do due diligence, and moved into the supposedly more lucrative activity of trading.\textsuperscript{289} By its very nature, trading is a risky enterprise with the possi-
bility of millions being earned or lost on a particular trade. It was the investment banking mentality, imported into banks such as Citicorp, and their subsequent bailout by the federal government that led to charges that profit has been privatized and risk has been socialized.

The Volcker rule, which would have in part separated trading activities and banking activities, was supposedly dead in the water in early 2010. However, while there are different views as to the extent proprietary trading contributed to the financial meltdown, a version of the Volcker rule was incorporated into Dodd–Frank.

Section 619 of the Financial Reform Act begins boldly by adding section 13 to the Bank Holding Company Act to impose what appears to be an absolute prohibition on proprietary trading and holding an interest in or sponsoring a hedge fund or a private equity fund:

(A) IN GENERAL:
(1) PROHIBITION – Unless otherwise provided in this section, a banking entity shall not –
(A) engage in proprietary trading; or
(B) acquire or retain any equity, partnership, or other ownership interest in or sponsor a hedge fund or a private equity fund.

This seemingly absolute prohibition is also applied to non-bank financial companies. But, the key words are “in general” and “unless otherwise provided.” The Act then mandates a six-month study and follow-up

290. See Volcker Rule, FIN. TIMES LEXICON, http://lexicon.ft.com/term.asp?t=Volcker-rule (last visited Aug. 29, 2011) (defining the Volcker Rule as “a proposal, announced by US President Barack Obama, aims to limit risky behavior within banks but is narrower than the Glass-Steagall Act. Banks that take retail deposits would not be allowed to engage in proprietary trading that is not directly related to the market making and trading they do for customers. These banks would also be prohibited from owning or sponsoring hedge funds or private equity funds.”).


292. Heidi N. Moore, Citigroup: Volcker Rule or Volcker Suggestion?, CNN MONEY (July 8, 2010), http://wallstreet.blogs.fortune.cnn.com/2010/07/08/citigroup-volcker-rule-or-volcker-suggestion/. In defending the separation of commercial banking and trading, Mr. Volcker “pointed both to the problems at Societe Generale, the French bank that lost billions of euros because of a rogue trader, and to Bear Stearns, the first casualty of the financial crisis. Bear’s problems first emerged in a hedge fund it ran, which it bailed out in an effort to preserve its reputation. Eventually, a liquidity crisis brought the bank down.” Floyd Norris, Volcker Rule May Work, Even if Vague, N.Y. TIMES, Jan. 21, 2011, at B1.


295. Volcker Rule Unexpectedly Revived by Dodd Bill, supra note 291.
rulemaking that, in effect, will defer the effectiveness of the amendment for two years after enactment. 296

This is followed by a series of exceptions, designated as "permitted activities,"297 and a "de minimis" provision, which will probably become the rule. De minimis is defined as not more than 3% of the total ownership interests in the fund or not more than 3% of the Tier 1 capital of the banking entity.298 The banking entity is required to meet the 3% investment limitation within one year after the establishment of the fund;299 however, the one year period can be extended by two years.300

Early this year, a report by the Financial Stability Oversight Council,301 pursuant to the mandate of Dodd–Frank,302 set forth the following recommended actions to implement the Volcker Rule:303

1. Require banking entities to sell or wind down all impermissible proprietary trading desks.
2. Require banking entities to implement a robust compliance regime, including public attestation by the CEO of the regime’s effectiveness.
3. Require banking entities to perform quantitative analysis to detect potentially impermissible proprietary trading without provisions for safe harbors.
4. Perform supervisory review of trading activity to distinguish permitted activities from impermissible proprietary trading.
5. Require banking entities to implement a mechanism that identifies to Agencies which trades are customer-initiated.
6. Require divestiture of impermissible proprietary trading positions and impose penalties when warranted.
7. Prohibit banking entities from investing in or sponsoring any hedge fund or private equity fund, except to bona fide trust, fiduciary or investment advisory customers.
8. Prohibit banking entities from engaging in transactions that would allow them to “bail out” a hedge fund or private equity fund.
9. Identify “similar funds” that should be brought within the scope of the Volcker Rule prohibitions in order to prevent evasion of the intent of the rule.
10. Require banking entities to publicly disclose permitted exposure to hedge funds and private equity funds.

What may turn out to be a key recommendation is the requirement that, not only must banks adopt a robust compliance program, but such

296. Dodd–Frank § 619 (adding § 13(b), (c)).
297. Id. § 619 (adding § 13(d)(1)(A)-(J)).
298. Id. § 619 (adding § 13(d)(4)).
299. Id. § 619 (adding § 13(d)(4)(B)(ii)).
300. Id. § 619 (adding § 13(d)(4)(C)).
303. FIN. STABILITY OVERSIGHT COUNCIL, supra note 301, at 3.
efforts must be attested to by the CEO of the company. In so doing, the Council is following the approach taken by the Sarbanes–Oxley legislation.304

While it will be years before the effectiveness of the provision on proprietary trading can be evaluated, the regulators seem to be off to a good start.

5. Too Big to Fail and Stemming Systemic Risk

The reason that companies are “too big to fail” is that their failure involves systemic risk, which impacts the rest of the economic system. Consider the Lehman Brothers bankruptcy, which was a result of the firm’s involvement in the subprime mortgage debacle. Lehman’s bankruptcy resulted in a money market fund, The Reserve Fund Primary, “breaking the buck.” That is, the value of a share in the mutual fund fell below one dollar.305 Money is invested or borrowed in a money market system on a short-term basis, sometimes overnight. While the return is not as much for a long-term investment, investors do not expect to lose any money. Money market funds are regarded as totally safe. Companies park their money in them overnight and rely upon them as a source of credit when they need short-term funds. All companies oscillate between having cash on hand and needing to borrow cash on a particular day.

Thus, when the Lehman Brothers debt was written down, first to $.80 on the dollar and then to zero, it created a panic as investors rushed to get their money out of money market funds.306 The result was that the commercial paper market, the most liquid in the world, began to freeze up. This then affected financial institutions and businesses around the country: “Money stopped moving. Big, safe, respected companies far away from all the subprime lending problems had trouble getting the short-term loans they needed to pay their bills.”307 Fortunately, the freeze only lasted for about twelve hours.308 Federal Reserve Chairman Bernanke feared that, had it lasted for days or weeks, “the consequences would be worse than the Great Depression.”309

The same day that the Reserve Fund broke the buck, the Federal Reserve stepped in with an $85 billion loan to AIG, fearful that the lack of liquidity for the firm, which was facing collateral calls from its

306. Id.
308. Id.
309. Id.
counterparties, could force it into bankruptcy.\textsuperscript{310} AIG also presented systemic risk because, if it did not honor its hundreds of billions of dollars in credit default swaps, its numerous counterparties would suffer devastating losses.\textsuperscript{311} Two days later, on September 18, Secretary Paulson and Chairman Bernanke went to Congress seeking the $700 billion financial bailout.\textsuperscript{312}

From the foregoing, it is clear that systemic risk is a reality and that steps need to be taken so that it does not lead to a financial meltdown in the future.

There are two aspects with regard to avoiding “too big to fail.” One is to have a mechanism outside bankruptcy for the government to take over the about to fail institution; another is to ensure that no institution is “too big to fail.” Arguably, if it is “too big to fail,” it is too big.\textsuperscript{313}

The “too big to fail” concept apparently originated with C. T. Conover’s testimony in connection with the failure of Continental Illinois National Bank, when he stated that he would not let the eleventh-largest bank fail.\textsuperscript{314} This created an implicit guarantee for large banks. But after the financial bailout in 2008, Sheila Bair, the head of the FDIC, stated that the guarantee, which had been implicit, was now explicit and was


giving large banks a competitive advantage. The Center for Economic and Policy Research estimated that the taxpayer subsidy for large banks was $34 billion a year, a substantial advantage over smaller banks, as stated above.

The systemic risk posed by the financial sector is a function of both its size and its concentration. Commercial banks in 1978 held $1.2 trillion of assets, about 53% of U.S. GDP. By 2007, their assets had grown to $11.8 trillion, or 84% of GDP. The assets of the six largest banks—Bank of America, JP Morgan Chase, Citigroup, Wells Fargo, Goldman Sachs, and Morgan Stanley—grew from under 20% of GDP to over 60%. Banking was no longer boring.


318. Id.

319. Id. at 203. A January 2011 study by the Financial Stability Oversight Council noted that “there is limited evidence that economies of scale and scope exist in the financial sector beyond modest size levels.” It further stated, “[m]ost research using data from years prior to 2000 found that scale economies disappear long before a firm would become large enough to be bound by the concentration limit. Some research using more recent data has found economies of scale for even the largest banking organizations, though the size of these economies is often modest and may not exist for firms with entrenched management.” FIN. STABILITY OVERSIGHT COUNCIL, supra note 301, at 11 (citation omitted). The study also found that the four largest U.S. commercial banking firms “control 56.6 percent of the market in general purpose credit card purchase volume. Similarly, these four firms originated 58.2 percent of mortgage loans by volume in 2009 and serviced 56.3 percent of such loans.” Id. at 13. They also have 34.68% of deposits. Id. at 24. Because the banks’ liabilities and capital are determined on a risk-weighted assets basis, the banks “deemed” size is less than its actual size. Id. at 6. Thus, “JPMorgan Chase, the nation’s second-biggest bank by assets, can merge with U.S. Bancorp, the 10th-biggest lender, and still fall comfortably under the limit.” Shahien Nasiripour, Trillion-Dollar Banks Could
"From the 1930s until 1980, financial sector profits grew at roughly the same rate as profits in the nonfinancial sector. But from 1980 until 2005, financial sector profits grew by 800 percent, . . . while nonfinancial sector profits grew by only 250%."320 Prior to 1982, compensation in the financial sector approximated that in the nonfinancial sector; however, by 2007 the financial sector compensation was twice that of other sectors.321

The fact that the subsidy provided by "too big to fail" provides a competitive advantage to the big banks has been discussed above. "Too big to fail" obviously increases potential taxpayer costs. But from a long-term perspective, it encourages management to engage in excessive risk-taking since, as demonstrated by recent history, management scores in the short term without consequences in the long term. Richard W. Fisher, the president of the Federal Reserve Bank of Dallas, has stated that "[t]he social costs associated with these big financial institutions are much greater than any benefits they may provide. We need to find some international convention to limit their size."322

When former Chairman Greenspan made his 2009 comment, "If they're too big to fail, they're too big," before the Council on Foreign Relations, he added, "So I mean, radical things, as you—you know, break them up, you know. In 1911, we broke up Standard Oil. So what happened? The individual parts became more valuable than the whole. Maybe that's what we need."323 That would certainly seem the most direct way to deal with the "too big" part of the "too big to fail" equation. The U.S. mentality needs to realize that bigness is problematic, particularly unregulated size.

So how do you put limits on size? One author has suggested that the assets of a commercial bank be limited to 4% of GDP, or roughly $570 billion.324 That certainly is not small! With respect to investment banks, the author would limit their size to 2% of GDP, or about $285 billion.325 These limits would only affect six banks: Bank of America (16% of GDP), J.P. Morgan Chase (14% of GDP), Citigroup (13% of GDP), Wells Fargo (9% of GDP), Goldman Sachs (6%) of GDP, and Morgan Stanley (5%) of GDP.326

Smaller banks would increase competition, limit systemic risk, decentralize decision-making and political power, provide more choice for con-

320. JOHNSON & KWAK, supra note 317, at 60–61.
321. Id.
324. JOHNSON & KWAK, supra note 317, at 214.
325. Id. at 215.
326. Id. at 217.
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consumers, and, if Chairman Greenspan is correct, increase profitability. The argument to the contrary is that large, multinational corporations need large banks. But, at present, these corporations are often serviced by a consortium of banks, so that should not be a disabling argument.

Paradoxically, a part of the size of these large banks is attributable to the aftermath of the financial crisis. Bank of America acquired Countrywide and Merrill Lynch, and grew 138%; J.P. Morgan Chase acquired Bear Stearns and Washington Mutual, and grew 51%; and Wells Fargo acquired Wachovia, and grew 43%.327 A previous conglomeratization phase occurred during the deregulatory mindset of President Clinton. For example, Wachovia was formed from mergers of First Union, CoreStates, and Wachovia; and Citicorp added Travelers Insurance, Primerica, and Salomon Brothers.328

Unfortunately, Dodd–Frank provisions are woefully inadequate with respect to the “too big” aspect. Section 622 of the Financial Reform Act deals with “Concentration Limits on Large Financial Firms.”329 It amends the Bank Holding Company Act by providing a broad definition of the term “financial company,” and then provides that a financial company shall not merge, consolidate, acquire substantially all the assets, or otherwise control another company “if the total consolidated liabilities of the acquiring financial company upon consummation of the transaction would exceed 10% of the aggregate consolidated liabilities of all financial companies,” measured at the end of the preceding calendar year.330 It then restricts any interstate merger if “the resulting insured depository institution . . . would control more than 10% of the total amount of deposits of insured depository institutions in the United States.”331 It also restricts a bank holding company from acquiring a depository institution if the bank holding company “would control more than 10% of the total amount of deposits.”332 Finally, it restricts a savings and loan holding company from acquiring an insured depository institution if it would control “more than 10% of the total amount deposits insured depository institutions in the United States.”333

The problem with these provisions is that each of them is immediately followed by a provision that negates the limits if the acquisition involves an insured depository institution “in default or in danger of default.”334

328. JOHNSON & KWAK, supra note 317, at 85.
330. Id. § 622 (adding § (14)(a), (b) to the Bank Holding Company Act, 12 U.S.C. § 1843 (2006)).
331. Id. § 623(a) (adding § (13)(A) to § 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c) (2006)).
332. Id. § 623(b) (adding § 4(i)(8)(A)(a) to the Bank Holding Company Act).
333. Id. § 623(c) (adding § 10(e)(2)(E) to the Homeowners Loan Act, 12 U.S.C. § 1467 (2006)).
334. Id.
As can be seen from the data above, many of the existing large banking institutions grew even larger by acquiring failing institutions. In addition, the Act would not deal with institutions that already exceed the 10% limit. Each of the three institutions discussed above obtained waivers of the 10% limit on deposits.

However, with respect to the “fail” aspect of “too big to fail,” Dodd–Frank is a landmark change, in that it provides governmental authority to take over a failing financial institution and thereby prevent the institution from going into bankruptcy. Former Secretary Paulson, when asked if the new Act would have prevented the current crisis, responded that “[w]e would have loved to have something like this for Lehman Brothers. There’s no doubt about it.”

Title I of the Act creates a Financial Stability Oversight Council, and Title II provides for orderly liquidation authority. In brief, the Council is composed of ten voting members and five nonvoting members, whose role is to “identify risks to the financial stability of the United States,” to promote market discipline by eliminating expectations that the government will bailout institutions in the future, and to respond to emerging threats to the financial system. To accomplish this, the Council is to collect information, monitor the financial services marketplace, identify gaps in regulation, and probably most important:

[M]ake recommendations to the Board of Governors concerning the establishment of heightened prudential standards for risk-based capital, leverage, liquidity, contingent capital, resolution plans and credit exposure reports, concentration limits, enhanced public disclosures, and overall risk management for nonbank financial companies and large, interconnected bank holding companies supervised by the Board of Governors.

If a financial company were determined to present systemic risk, the FDIC could be appointed receiver of the company. This could be done either with the consent of the board of directors or pursuant to a

337. Id. §§ 201–17.
338. Id. § 111(b).
339. Id. § 11(a)(1).
340. Id. § 11(a)(2)(A), (C), (G), (I).
341. Id. § 201(a)(11) (the definition includes bank holding companies, non-bank financial companies supervised by the board of governors, any company that is predominantly engaged in activities determined to be financial in nature or incidental thereto, and a subsidiary of the foregoing).
342. This recommendation is made by the FDIC, either on its own motion or pursuant to a request from the Secretary of the Treasury, and the Board of Governors of the Federal Reserve. Id. § 202. In the case of a broker dealer, it is the SEC, not the FDIC, that would make the recommendation and, in the case of an insurance company, it is the director of the Federal Insurance Office that would make the recommendation. The procedures for the systemic risk determination are set forth in § 203. See id. § 203.
343. Id. § 202(a)(1)(A)(i).
court order in a nonpublic hearing, in which the receivership must be granted so long as the determination of the Secretary of the Treasury is not "arbitrary and capricious." The receiver is to take over the assets of the company and operate it while it is in the receivership and has broad authority to sell selected assets of the company or arrange for the acquisition of the company. It can also create a "bridge financial company" to succeed to certain assets and liabilities, as an interim measure pending a permanent transaction with a private acquirer. The receiver has the authority to establish priorities and to sue to set aside fraudulent transfers and preferences, similar to the authority contained in the bankruptcy code. The board of directors and senior management must be replaced, and management can be held responsible for the financial condition of the company. A director or senior executive officer can also be barred for up to two years from any affiliation with any financial company if it is determined that such person has violated any law or regulation, or has engaged or participated in any unsafe or unsound practice, or has committed a breach of fiduciary duty.

One of the issues raised as the legislation was being considered, and even after it was signed into law, was whether it would increase the likelihood of future government bailouts. However, Dodd–Frank specifically provides that "all financial companies put into receivership... shall be liquidated," that "all funds expended in the liquidation... shall be recovered from the disposition of assets of [the] financial company, or shall be the responsibility of the financial sector, through assessments," and that "[t]axpayers shall bear no losses from the exercise of any authority under" the receivership provisions.

C. The Credit Rating Agencies: Manufacturing AAA Ratings

Probably the most reprehensible players in the subprime crisis have been the credit rating agencies. It is clear that the goal of mortgage brokers, mortgage lenders, and investment banks is to make money for the benefit of their shareholders. With respect to the credit rating agencies, on the other hand, while they are in business, their business is involved with the public trust. They are seen, or rather had been seen, as institutions upon whom investors could rely for impartial judgment. Investors

344. Id. § 202(a)(1)(A)(iv).
345. Id. § 210(a)(1)(B).
346. Id. § 210(a)(1)(F).
347. See id. § 201(a)(3) (definition); § 210(h) (procedures and powers). The duration of a bridge company is limited to two years, unless extended by the FDIC. See id. § 210(h)(12). The reason for this short duration is because the purpose of a bridge company is to serve as a vehicle for an ultimate transfer to a private buyer.
348. See id. § 210(b) (priority of expenses and unsecured claims); § 210(a)(11) (avoidable transfers).
349. Id. § 206(4)(5).
350. Id. § 210(f) (the standard for liability is gross negligence).
351. Id. § 213.
353. Dodd–Frank § 214.
around the world relied upon their analysis. Mortgage-backed securities and collateralized debt obligations are complex instruments, which few investors would have the time or expertise to analyze. Standard and Poor’s said that “Lehman and AIG are included in 2634 tranches of 1889 synthetic CDO’s.” The Securities and Exchange Commission has observed:

Some investors use the credit ratings to assess the risk of the debt instruments. In part, this may be due to the large number of debt instruments in the market and their complexity. Other investors use credit ratings to satisfy client investment mandates regarding the types of securities they can invest in or to satisfy regulatory requirements based on certain levels of credit ratings, or a combination of these conditions. Moreover, investors typically only have looked to ratings issued by Fitch, Moody’s, and S&P, which causes the arrangers of the subprime RMBS and CDOs to use these three NRSROs to obtain credit ratings for the tranche securities they brought to market.

As previously discussed, the period from 2004 to 2007 was a critical one in terms of the deterioration of quality of the mortgages that were securitized. In 2004, Moody’s and Standard & Poor’s “eased their standards” under pressure from Wall Street to enable more securities to be rated AAA. They changed their rating models to accommodate more concentration in one type of asset and utilize a hypothetical investment pool. The overall effect was to create more AAA securities (the supposedly safest type). Thereafter, one study found that “the value of AAA-rated mortgage-backed securities (as measured by the corresponding credit default swaps prices) [had] fallen by 70 percent between January 2007 and December 2008.” According to another report, by August 2008, Moody’s had downgraded 90% of all asset-backed CDO investments issued in 2006 and 2007, and Standard & Poor’s had downgraded 84% of the CDO tranches it rated. Moreover, they had down-


357. See supra text accompanying notes 34–52.

358. See Smith, supra note 163.

359. Id.

360. Id.


graded 85% and 76%, respectively, of the AAA securities they had rated.\textsuperscript{363}

What is particularly shocking is the lack of due diligence done by the rating agencies in connection with issuing AAA ratings, from which they collected hefty fees. As the Financial Crisis Inquiry Commission stated, while the rating agencies considered themselves the "umpire in the market, "they did not review the quality of individual mortgages in a mortgage-backed security, nor did they check to see that the mortgages were what the securitizers said they were."\textsuperscript{364} What happened? Basically, the rating agencies were bought off by the investment bankers. At one time, the credit rating agencies charged a subscription fee to subscribers to cover their rating activity.\textsuperscript{365} That has changed: the current practice is that the company or issue being rated pays the fee.\textsuperscript{366} Thus, there is an inherent conflict of interest. For example, Standard & Poor's claimed that such a conflict was not a concern since it rated 37,000 issues.\textsuperscript{367} However, with respect to structured financial products such as the securitized mortgages, the rating agencies could charge almost three times as much as they charged for rating corporate bonds.\textsuperscript{368} This created a huge incentive to get the business. While there are those who advocate going back to a subscription fee,\textsuperscript{369} the rating agencies disagree.\textsuperscript{370} In an electronic world, the agencies worry about the problem of free riding.\textsuperscript{371}

But the fees paid for rating services were not the only conflicts of interest that infected the rating process. Former SEC Chairman Cox has observed that:

[S]tructured products were specifically designed for each tranche to achieve a particular credit rating—and the ratings agencies then made a lucrative business of consulting with issuers on exactly how to go about getting those ratings. Selling consulting services to entities that purchased ratings became a triple-A conflict of interest.\textsuperscript{372}

\textsuperscript{363} Id.
\textsuperscript{364} Id.
\textsuperscript{365} See Standard & Poor's Ratings Servs., Role and Function of Credit Rating Agencies in the U.S. Securities Markets (2002), available at http://www.sec.gov/news/extra/cred rate/standardpoors.htm ("Since 1968, Standard & Poor's has charged issuers for its credit rating services. The practice was implemented because of increasing costs related to credit ratings surveillance and the growing need for more ratings coverage. Prior to that, Standard & Poor's provided its credit ratings services on the basis of subscription fees, which were not adequate to offset the increased costs of maintaining a high level of quality in this business.").
\textsuperscript{366} Id.
\textsuperscript{367} Id.
\textsuperscript{368} See Grimshaw, supra note 362.
\textsuperscript{369} See Pagano & Volpin, supra note 361, at 3, 8.
\textsuperscript{371} Marco Pagano & Paolo Volpin, supra note 361, at 3.
Fortunately, the SEC has adopted a new rule prohibiting this activity.\textsuperscript{373} Of the three rating agencies,\textsuperscript{374} Moody’s is the only freestanding, publicly-traded agency.\textsuperscript{375} Once again, it is instructive to look at the stock price movement during the time of the subprime crisis. From 2003 to 2007, the price of Moody’s advanced from $20 a share to about $70 a share, or an increase of about 250%, as shown in the chart below.\textsuperscript{376} The process repeats itself—more business means more income means stock appreciation. There is nothing wrong with this process so long as the increased business is legitimate.

\textbf{MOODY’S}

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As one former Moody’s analyst stated:

When I joined Moody’s in late 1997, an analyst’s worst fear was that he would contribute to the assignment of a rating that was wrong, damage Moody’s reputation for getting the answer right and lose his job as a result.

When I left Moody’s, an analyst’s worst fear was that he would do something that would allow him to be singled out for jeopardizing Moody’s market share, for impairing Moody’s revenue or for damaging Moody’s relationships with its clients and lose his job as a

\begin{itemize}
\item \textsuperscript{373} 17 C.F.R. § 24017g-5(c)(5) (2009).
\item \textsuperscript{374} David Evens & Caroline Salas, Flawed Credit Ratings Reap Profits as Regulators Fail Investors, BLOOMBERG (Apr. 29, 2009), www.bloomberg.com/apps/news?pid=news archive&sid=a6NdKd8CFR2A.
\item \textsuperscript{375} Moody’s became an independent, publicly traded company as a result of a spinoff on September 30, 2000. For a history of the various spinoffs by which Moody’s became an independent company, see Moody’s Corp., Annual Report (Form 10-K), at 2 (Mar. 22, 2002), available at http://www.sec.gov/Archives/edgar/data/1059556/000095012302002821/y58653e10-K405.htm#001.
\item \textsuperscript{376} See Moody’s Corp. Common Stock, YAHOO! FINANCE, http://finance.yahoo.com/q?s=MCO (last visited Oct. 9, 2009) (historical data available via navigation menu on the left side of this page).
\end{itemize}
How do you change the mindset that "[l]et's hope we are all wealthy and retired by the time this house of cards falters"?

One way would be to go back to the practice that prevailed before 1970 and have the investor, rather than the issuer, pay the fee. However, the implementation process and costs for such a change-over would be substantial; accordingly, a study presented to the British Treasury and Bank of England recommended that "issuers should pay an upfront fee irrespective of the rating issued (the so-called Cuomo Plan, named after New York Attorney General Andrew Cuomo) and credit shopping should be banned."

Another possibility would be to subject the rating agencies to civil liability. Until Dodd–Frank, rating agencies were insulated from liability under Section 11 of the Federal Securities Act of 1933. While Dodd–Frank would reverse that, the rating agencies long contended that their ratings are opinions, which are protected under the First Amendment as free speech.

D. Dodd–Frank's More Aggressive Approach Toward the Credit Rating Agencies

The current financial crisis also would not have occurred had it not been for the ineptitude, if not concupiscence, of the credit rating agencies. Recall the comment: "[l]et's hope we are all wealthy and retired by the time this house of cards falters." Since the reputation of the credit


379. See Pagano & Volpin, supra note 361, at 3.

380. See 15 U.S.C. § 77k (2006); 17 CFR § 230.436(g)(1) (2010) (Providing that a rating which is assigned to a security “shall not be considered a part of the registration statement prepared or certified by a person within the meaning of sections 7 and 11 of the Act.” Section 11 is the civil liability section for misrepresentations or omissions in a registration statement.).


382. See STANDARD & POOR'S RATINGS SERVS., supra note 365 (“Today, credit rating agencies are free to develop and publish their credit rating opinions under strong First Amendment protections. Indeed, it is Standard & Poor's key role as a publisher of credit ratings and financial information that has been the basis for judicial recognition of significant First Amendment protections afforded to Standard & Poor's.”); see also Frank Partnoy, How and Why Credit Rating Agencies Are Not Like Other Gatekeepers, UNIV. OF SAN DIEGO SCH. OF LAW (May 2006), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=900257.

383. SEC, SUMMARY REPORT OF ISSUES IDENTIFIED IN THE COMMISSION STAFF'S EXAMINATION OF SELECT RATING AGENCIES 12, n.8 (e-mail from one analytic manager to a
rating agencies was in tatters, it is not surprising that Dodd–Frank took a
principled approach in seeking to preclude a repetition of the ratings de-
bacle. Professor Partnoy has stated that the agencies “are not informa-
tion intermediaries who survive and prosper based on the quality of their
ratings. Instead, they have shifted from selling information to selling reg-
ulatory licenses.”

1. The Credit Rating Agencies, the First Amendment, and Civil
Liability

Subtitle C of Title IX of Dodd–Frank deals with the credit rating agen-
cies. The provisions start with a series of findings that are devastating
and that should undercut the argument of the rating agencies that their
ratings are protected as free speech under the First Amendment. The
findings refer to “the systemic importance of credit ratings and the reli-
ance placed on” them, and assert that the rating agencies “play a critical
‘gatekeeper’ role in the debt market that is functionally similar to that of
securities analysts.” Congress then found that, because the rating

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senior analytic manager at a credit rating agency; the e-mail also refers to the credit rating agencies having created a “monster”) [hereinafter SUMMARY REPORT], available at http://

384. Frank Partnoy, Professor of Law, Univ. of San Diego Sch. of Law, Roundtable to

385. Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-

386. See STANDARD & POOR’S RATINGS SERVS., supra note 365 (“Today, credit rating
agencies are free to develop and publish their credit rating opinions under strong First
Amendment protections.”)

387. The complete findings, set forth in Dodd–Frank § 931, are:
(1) Because of the systemic importance of credit ratings and the reliance
placed on credit ratings by individual and institutional investors and financial
regulators, the activities and performances of credit rating agencies, includ-
ing nationally recognized statistical rating organizations, are matters of na-
tional public interest, as credit rating agencies are central to capital
formation, investor confidence, and the efficient performance of the United
States economy.
(2) Credit rating agencies, including nationally recognized statistical rating
organizations, play a critical “gatekeeper” role in the debt market that is
functionally similar to that of securities analysts, who evaluate the quality of
securities in the equity market, and auditors, who review the financial state-
ments of firms. Such role justifies a similar level of public oversight and
accountability.
(3) Because credit rating agencies perform evaluative and analytical services
on behalf of clients, much as other financial “gatekeepers” do, the activities
of credit rating agencies are fundamentally commercial in character and
should be subject to the same standards of liability and oversight as apply to
auditors, securities analysts, and investment bankers.
(4) In certain activities, particularly in advising arrangers of structured finan-
cial products on potential ratings of such products, credit rating agencies face
conflicts of interest that need to be carefully monitored and that therefore
should be addressed explicitly in legislation in order to give clearer authority
to the Securities and Exchange Commission.
(5) In the recent financial crisis, the ratings on structured financial products
have proven to be inaccurate. This inaccuracy contributed significantly to the
mismanagement of risks by financial institutions and investors, which in turn
agencies provide services on behalf of clients similar to other financial gatekeepers, "the activities of credit rating agencies are fundamentally commercial in character and should be subject to the same standards of liability and oversight as apply to auditors, securities analysts, and investment bankers." 388

This finding should vitiate the rating agencies' First Amendment argument that they should have no civil liability. The findings further noted the conflicts of interest that occurred when the agencies advised underwriters of structured financial products on how to secure a desired rating and further found "the ratings on structured financial products have proven to be inaccurate" and that "[t]his inaccuracy contributed significantly to the mismanagement of risks," which impacted the economy of the United States and the world. 389 The foregoing "necessitates increased accountability on the part of the credit rating agencies." 390

Recent judicial opinions refusing to afford credit rating agencies First Amendment protection should be bulwarked by the legislative findings in Dodd–Frank. In Abu Dhabi Commercial Bank v. Morgan Stanley & Co., the court stated:

It is well-established that under typical circumstances, the First Amendment protects rating agencies, subject to an "actual malice" exception, from liability arising out of their issuance of ratings and reports because their ratings are considered matters of public concern. However, where a rating agency has disseminated their ratings to a select group of investors rather than to the public at large, the rating agency is not afforded the same protection. Here, plaintiffs have plainly alleged that the Cheyne SIV's ratings were never widely disseminated, but were provided instead in connection with a private placement to a select group of investors. Thus, the Rating Agencies' First Amendment argument is rejected. 391

A California state court decision, while purporting to follow the Morgan Stanley case, used even more expansive language:

The issuance of these SIV ratings is not, however, an issue of public concern. Rather, it is an economic activity designed for a limited target for the purpose of making money. That is not something that should be accorded First Amendment protection and the Defendants are not akin to members of the financial press. 392

Following up on the foregoing, Dodd–Frank, in dealing with accountability, sets forth a clear intention that the credit rating agencies are sub-

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388. Id.
389. Id.
390. Id.
ject both to enforcement actions by the SEC and to private damage actions by injured investors. Section 15E of the 1934 Securities Exchange Act formerly provided that "[n]othing in this section may be construed as creating a private right of action, and no report furnished by a nationally recognized statistical rating organization in accordance with this section or section 17 shall create a private right of action under section 18 or any other provision of law." This provision has now been replaced with the following:

The enforcement and penalty provisions of this title shall apply to statements made by a credit rating agency in the same manner and to the same extent as such provisions apply to statements made by a registered public accounting firm or a securities analyst under the securities laws, and such statements shall not be deemed forward-looking statements for the purposes of section 21E.

Not only does this subject credit rating agencies to enforcement and penalty actions by the SEC, but it also specifies that the credit rating agencies may not seek to limit their responsibility by claiming that ratings are forward-looking statements. If they were considered forward-looking statements, the agencies would be exculpated from liability if they accompanied the ratings with a cautionary statement.

The Act likewise makes clear that the credit rating agencies can be subjected to a cause of action brought by a private investor. In such a case, the “state of mind” or scienter provision with respect to a suit by a private investor was amended by adding the following:

In the case of an action for money damages brought against a credit rating agency or a controlling person under this title, it shall be sufficient, for purposes of pleading any required state of mind in relation to such action, that the complaint state with particularity facts giving rise to a strong inference that the credit rating agency knowingly or recklessly failed:

(i) to conduct a reasonable investigation of the rated security with respect to the factual elements relied upon by its own methodology for evaluating credit risk; or
(ii) to obtain reasonable verification of such factual elements... from other sources that the credit rating agency considered to be competent and that were independent of the issuer and the underwriter.

The specter of an SEC penalty action or a private damage action should have a sobering effect upon the management of the credit rating

395. If a cautionary statement were employed, the maker is protected from liability even if such person had actual knowledge that the statement was false or misleading. See Charles W. Murdock, Corporate Corruption and the Complicity of Congress and the Supreme Court—The Tortuous Path from Central Bank to Stoneridge Investment Partners, 6 BERKELY BUS. L.J. 131, 188–92 (2009).
396. Dodd–Frank § 933.
agencies. Dodd–Frank also sprung a bombshell with respect to the Securities Act of 1933 by repealing an SEC rule that provided that a security rating was not considered part of the registration statement. This one-sentence provision in the Act has the effect of exposing rating agencies to Section 11 liability as an expert. In such a case, the rating agency would have liability for any false or misleading statement unless "after reasonable investigation, [the rating agency had] reasonable ground to believe and did believe . . . that the statements therein were true and that there was no omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading."

The rating agencies immediately refused to consent to the use of their ratings in a registration statement, and the SEC responded by issuing a no-action letter that it would take no action for a period of six months if an asset-backed issuer omitted a ratings disclosure in the registration statement. Thus, there has been a short term impasse as to whether ratings will be included in a registration statement, as now required in certain instances, or whether the rating agencies will capitulate and instead ensure that their ratings meet the due diligence now required under the 1934 Act.

The SEC recently extended indefinitely the waiver embodied in the July 22, 2010, no-action letter on the basis that the rating agencies have refused to provide their consent to being named as experts, thus bringing the market for asset-backed securities to a halt. The SEC took such action so that investors would not be denied the benefit of registration.

There were also several changes that might look like merely technical corrections, but which also could be significant. In Section 15E of the 1934 Act, the words "furnished" or "furnishing" were stricken and replaced by the words "filed" or "filing." The significance of these changes is that there is liability for a false filing under Section 18 of the 1934 Act. Arguably, there would not be liability if the material were just "furnished" to the SEC, rather than "filed."

2. Structural and Transparency Changes

In addition to the presently-existing power to censure, suspend, or revoke the registration of a rating agency, the SEC was also given the power to censure, suspend, or bar employees associated with the rating agency, and failure to supervise was added as a basis for discipline. The SEC was also given additional power to suspend or revoke the regis-

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397. Id. § 939G.
401. Id.
402. See, e.g., Dodd–Frank § 932(a)(1) (amending 15 U.S.C. §78o-7(b)).
404. Dodd–Frank § 932(a)(3) (amending 15 U.S.C. § 78o-7(d)).
tration of the rating agency with respect to a particular class or subclass of securities if the "rating organization does not have adequate financial and managerial resources to consistently produce credit ratings with integrity."\textsuperscript{405} The impetus for this provision came from the fact that the rating agencies, while doing a professional job with respect to corporate bonds, for example, failed miserably in their ratings of mortgage-backed securities and collateralized debt obligations (CDOs).\textsuperscript{406}

A 2008 study by the SEC of credit rating agencies disclosed that, while the number of CDOs grew almost geometrically from 2003 until 2007, the credit rating staff dedicated to reviewing the CDO deals was increased by a minuscule number.\textsuperscript{407} See the chart below:

### PERCENTAGE CHANGE COMPARISON FROM 2002 VERSUS 2003 - 2007 IN CDO REVENUE, RATED DEALS, AND RATINGS STAFF

<table>
<thead>
<tr>
<th>Year</th>
<th>Firm 1</th>
<th>Firm 2</th>
<th>Firm 3</th>
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<tbody>
<tr>
<td>2003</td>
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<td>2004</td>
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<tr>
<td>2007</td>
<td>0%</td>
<td>0%</td>
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</tr>
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\* Firm 2 did not provide 2002 CDO revenue data. Therefore, the CDO revenue percentage change is based upon the 2003 balance as opposed to 2002.

\*** Firm 3 provided 9 months of CDO revenue for 2006. Therefore, 12 months of estimated 2006 revenue was extrapolated for CDO by multiplying 9 months of revenue by 1.3.

The implicit premise of the new change is that, if the agency does not staff a business segment adequately, the SEC can revoke or suspend its registration with respect to issuing ratings by this segment.

In order to help ensure quality ratings, the Act requires that each rating agency "establish, maintain, enforce, and document an effective internal control structure governing the implementation of and adherence to policies, procedures and methodologies for determining credit ratings."\textsuperscript{408} It further requires that the agency submit annually to the SEC an internal controls report, which would include an assessment of its effectiveness and an attestation by the chief executive officer of such assessment.\textsuperscript{409} This is similar to the attestation requirement for chief executive

\textsuperscript{405} Id. (adding subparagraph (d)(2)(A)).

\textsuperscript{406} See \textit{supra} text accompanying notes 357–65.

\textsuperscript{407} \textit{SUMMARY REPORT}, \textit{supra} note 383, at 11.

\textsuperscript{408} Dodd–Frank § 932(a)(2) (adding 15 U.S.C. § 78o-7(c)(3)).

\textsuperscript{409} \textit{Id}. 
There is a further requirement in the Act that each rating agency, in effect, have a compliance officer who is essentially independent, that is, he or she does not perform credit ratings, participate in the development of methodologies, perform marketing or sales functions, or participate in establishing compensation levels. Such person, whose compensation cannot be linked to the financial performance of the agency, is required to submit an annual compliance report to the rating agency, which shall file the report with the SEC. The SEC is also required to issue rules "to prevent the sales and marketing considerations" of the rating agency "from influencing the production of ratings" by the rating agency. Because of the additional responsibilities imposed upon the SEC, the Act instructs the SEC to establish an "Office of Credit Ratings," the director of which should report directly to the SEC Chairman.

In addition to placing these responsibilities upon management, Dodd–Frank has additional provisions with respect to corporate governance. Each rating agency shall have a board of directors, half of which must be independent, and at least one director must be a user of ratings. The compensation of the independent directors cannot be linked to the business performance of the rating agency. If the rating agency is a subsidiary of another company, the foregoing responsibilities can be assigned to a committee of the board of directors of the parent company. The board of directors has the duty to oversee policies and procedures for determining credit ratings, managing conflicts of interest, monitoring the internal control system, and overseeing the compensation and promotion policies and practices. Clarifying responsibilities of the board should help to redirect the focus of rating agencies, from merely producing ratings and generating revenue to a focus on the quality of the ratings.

Dodd–Frank also added three additional subsections to Section 15E of the 1934 Act dealing with transparency of ratings performance, credit-rating methodologies, and transparency of credit-rating methodologies. Basically, the first provision is designed to require the rating agency to disclose information on its initial ratings for each type of obligation.
gor and security, and subsequent changes to the ratings to enable the evaluation of their accuracy, and to provide comparison among rating agencies. The second is to require the SEC to ensure that the procedures and methodologies of the rating agencies are in accordance with policies and procedures that are approved by the board and that material changes are applied consistently; the rating agency is also required to disclose publicly any reason for changes. The third is to require that the rating agencies disclose the assumptions underlying their procedures, methodologies, and data that was relied upon, so users of credit information can understand the ratings process. The SEC was instructed to develop forms for this process to deal with both qualitative issues and quantitative issues and has already taken some steps in this direction pursuant to the final rules promulgated on February 2, 2009.422

These changes have already altered the landscape of credit rating and, hopefully, will return integrity to the credit rating process.

VI. DERIVATIVES: AIG, GOLDMAN SACHS, AND CREDIT DEFAULT SWAPS

A. THE BACKGROUND OF THE GROWTH IN DERIVATIVES

No analysis of the financial meltdown would be complete without examining the role of derivatives, particularly credit default swaps (CDS),423 which Warren Buffett has characterized as "financial weapons of mass destruction."424 One of the difficulties, however, is the lack of information. While Brooksley Born, the former head of the Commodity Futures Trading Commission, foresaw the risks from these instruments and sought to regulate them,425 the Clinton administration, led by Rubin and Summers,426 in conjunction with Alan Greenspan,427 squelched her efforts and induced Congress, under the leadership of Senator Phil

423. A credit default swap is "a type of credit derivative allowing a purchaser of the swap to transfer loan default risk to a seller of the swap. The seller agrees to pay the purchaser if a default event occurs. The purchaser does not own the loan covered by the swap." See FCIC REPORT, supra note 24.
426. See Bowen testimony, supra note 104; Goodman, supra note 287.
427. See Goodman, supra note 287.
The Dodd–Frank Wall Street Reform Act

Gramm, to enact legislation freeing derivatives from regulation.\footnote{428} Following this, the President’s Working Group on Financial Markets, in 1999, concluded that “the trading of financial derivatives by eligible swap participants should be excluded from the CEA. To do otherwise would perpetuate legal uncertainty or impose unnecessary regulatory burdens and constraints upon the development of these markets in the United States.”\footnote{429} At that time, the volume of over-the-counter derivative contracts was $80 trillion.\footnote{430} The volume has now grown to $600 trillion.\footnote{431} The markets have certainly developed! Compare this to the United States’ GDP in 2008 of about $14.2 trillion.\footnote{432} Derivative contracts, however, are reported in notional value.\footnote{433} In other words, for a $1 million dollar loan, the notional value of a derivative credit default swap contract is reported as $1 million, even though the risk of loss may not be anywhere near that figure.\footnote{434} But the fact that credit default swaps are privately traded makes transparency and accurate information difficult.\footnote{435}

According to the Comptroller of the Currency, in the third quarter of 2009, U.S. commercial banks held $204.3 trillion of derivative contracts, and the credit exposure was $484 billion.\footnote{436} This report, however, covered only a fraction of the overall derivatives market and provided gross information without significant detail.\footnote{437} In previous reports, the Comptroller of the Currency noted that “[f]rom 2003 to 2007 creditor derivative contracts (CDSs) grew at a 100% compounded annual growth rate,”\footnote{438} from about $1 trillion in 2003 to about $16 trillion in 2007.\footnote{439} This is illustrated below:  

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure.png}
\caption{Growth of Derivative Contracts}
\end{figure}


430. Id. at 3.  


435. Id.  


437. See id.  


439. Id. at 10, fig.2.  

440. Id.}
DERIVATIVE CONTRACTS BY TYPE ($ BILLIONS)

<table>
<thead>
<tr>
<th>Type</th>
<th>Ln Blns</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate</td>
<td>24,785</td>
<td>27,772</td>
<td>32,938</td>
<td>38,305</td>
<td>48,347</td>
<td>61,856</td>
<td>75,518</td>
<td>94,520</td>
<td>107,415</td>
<td>129,574</td>
<td>154,194</td>
<td>169,373</td>
<td>171,903</td>
<td>172,561</td>
</tr>
<tr>
<td>Foreign Exch</td>
<td>7,386</td>
<td>5,915</td>
<td>6,099</td>
<td>6,076</td>
<td>7,112</td>
<td>8,607</td>
<td>9,382</td>
<td>11,008</td>
<td>16,614</td>
<td>16,847</td>
<td>21,160</td>
<td>22,915</td>
<td>27,185</td>
<td>32,938</td>
</tr>
<tr>
<td>Equities</td>
<td>501</td>
<td>672</td>
<td>858</td>
<td>770</td>
<td>783</td>
<td>829</td>
<td>1,255</td>
<td>2,271</td>
<td>2,522</td>
<td>2,707</td>
<td>2,134</td>
<td>2,942</td>
<td>2,182</td>
<td>2,182</td>
</tr>
<tr>
<td>Commodities</td>
<td>183</td>
<td>171</td>
<td>222</td>
<td>179</td>
<td>233</td>
<td>214</td>
<td>289</td>
<td>398</td>
<td>893</td>
<td>1,073</td>
<td>1,059</td>
<td>930</td>
<td>909</td>
<td>926</td>
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<tr>
<td>Credit Derivatives</td>
<td>144</td>
<td>287</td>
<td>436</td>
<td>395</td>
<td>635</td>
<td>1,001</td>
<td>2,247</td>
<td>5,822</td>
<td>9,019</td>
<td>15,861</td>
<td>15,897</td>
<td>16,607</td>
<td>13,440</td>
<td>12,986</td>
</tr>
<tr>
<td>TOTAL</td>
<td>32,999</td>
<td>34,816</td>
<td>40,543</td>
<td>45,305</td>
<td>56,075</td>
<td>71,082</td>
<td>87,880</td>
<td>101,477</td>
<td>131,499</td>
<td>165,645</td>
<td>200,382</td>
<td>201,964</td>
<td>203,460</td>
<td>204,264</td>
</tr>
</tbody>
</table>

B. AIG’s Entry into the Derivative Business and Its Downfall

The federal government’s bailout of AIG, which could have been as much as $180.5 billion,\(^4\) has prompted Congress to seek detail from AIG about its derivative activity.\(^4\) Unfortunately, the SEC initially supported AIG in keeping secret the details of AIG’s funneling of billions of dollars of bailout money to major financial institutions\(^4\) to satisfy, arguably at 100 cents on the dollar, AIG’s obligations under credit default swaps it issued to the institutions.\(^4\) The exhibit detailing this information was recently disclosed to the public,\(^4\) listing more than a dozen financial institutions, domestic and foreign, that were beneficiaries of the credit default swaps issued from AIG.\(^4\) It also listed the various tranches of mortgage-backed securities that were insured\(^4\) and the notional value of the credit default swaps, which were over $62 trillion and reflected an obligation of AIG under the CDSs of over $32.5 billion.\(^4\)

What were the incentives that led AIG, which had prided itself on its AAA credit rating and its ability to manage and hedge risk, to incur liabilities of this magnitude?

By way of background, the “quants”\(^4\) behind AIG’s entry into the

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445. Id.
447. Id.
448. Id. at 5.
449. “Quants” is the designation in financial circles of highly educated and sophisticated people who do quantitative analysis, basically the application of higher mathematics.
derivative business were Howard Sosin and Randy Rackson. When they left Drexel to form the Financial Products Unit at AIG, they negotiated for 38% of the profits and set up a system that supposedly "married technology, intelligence, verve, and cultural discipline." According to them, "[t]he excitement of it wasn't the money. The money was the scorecard. The drive behind it was creating something new." The first derivative they entered into was a $1 billion interest rate swap that was ten times larger than the typical Wall Street swap at that time. A swap of this sort had minimal exposure vis-à-vis its notional value and could be hedged. It earned $3 million for Financial Products, as much as AIG's other financial operations earned in a year. This encouraged additional focus upon derivatives.

Ten years later, Financial Products created a new derivative contract, a credit default swap. This instrument looked like it could mint money; the computer model showed that AIG would have a 99.85% chance of never having to make any payment. Tom Savage, the then-President of Financial Products stated, "[t]he models suggested that the risk was so remote that the fees were almost free money. Just put it on your books and enjoy the money." However, the computer models were based upon corporate debt, a subject upon which there existed years of historical financial data.

Unfortunately, AIG moved into guaranteeing securities involving mortgage-backed securities, and including collateralized debt obligations, which increasingly incorporated subprime and Alt-A loans. Not only was there limited historical data on these loans, but the data that did exist was stale since, as discussed earlier, underwriting standards were eroding. Paul Wilmot, one of the world's leading quants, stated in 2009 with respect to CDOs: "They built these things on false assumptions without testing them, and stuffed them full of trillions of dollars. How could anyone have thought that was a good idea? . . . We don't have the tools yet to truly price them. People thought we did, but they were nowhere to finance. Sosin was a finance scholar "who had honed his theories" at Bell Labs before moving to Drexel Burnham Lambert, while Rackson was a "computer wizard" from the Wharton Business School. See Robert O'Harrow Jr. & Brady Dennis, What Went Wrong: The Beautiful Machine, WASH. POST, Dec. 29, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/12/28/AR2008122801916_pf.html.

450. Id.
451. Id.
452. Id.
453. Id. at 3.
454. Id.
455. Id.
456. Id.
458. Id.
459. Id.
460. Id. at 4.
461. See supra text accompanying notes 172–83.
near robust enough." In other words, garbage in equals garbage out.

It was the reliance upon its AAA rating that, in part, led to AIG’s downfall. To appreciate this, consider the interrelationships between the CDOs issued by the investment bankers and the credit default swaps issued by AIG. As stated earlier, a CDO is a complex instrument. First, take a pool of mortgages whose tranches are rated from AAA to BB, or even unrated. Then take slices, some BBB, some BB and lower, and put them in a CDO. Even though none of the mortgage slices are AAA, the rating agencies would give the top tranches of the CDO an AAA rating, arguably because it had the first claim on payments in the CDO pool and was undergirded by the lower tranches. This is somewhat similar to the medieval alchemists who supposedly made gold out of base metal. To enhance the top tranche, the investment bankers would purchase credit default insurance from AIG or another vendor.

Now, the AAA tranche looked good to investors. In fact, it looked so good that there was less interest in the lower-rated tranches, with the result that the financial institutions who syndicated the lower-rated CDOs sometimes got stuck with them, a subject discussed in the next section. But the AAA tranche was readily salable—its income was undergirded by the lower tranches and was guaranteed by AIG, with its AAA credit rating. Consequently, it was rated AAA by the rating agencies.

The undergirding by the lower rated tranches was somewhat illusory. If there were ten tranches, the image might be of a cylinder with the top

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463. The tranching process itself is deceptive. The SEC explained the process as follows:

For example, if a trust issued securities in 10 different tranches of securities, the first (or senior) tranche would have nine subordinate tranches, the next highest tranche would have eight subordinate tranches and so on down the capital structure. Losses of interest and principal experienced by the trust from delinquencies and defaults among loans in the pool are allocated first to the lowest tranche until its principal amount is exhausted and then to the next lowest tranche and so on up the capital structure. Consequently, the senior tranche would not incur any loss until the principal amounts from all the lower tranches have been exhausted through the absorption of losses from the underlying loans.

See SEC, Proposed Rules for Nationally Recognized Statistical Rating Organizations, Release No. 34-57967, at 9–11 (2008). This suggests a linear relationship; in other words, the top tranche is supported by the assets and income expected by the other nine tranches. But, for example, in the Ameriquest Mortgage Securities, Inc/Asset Backed Pass-Through Certificates/Series 2005-R11 424 BS, Dec. 19, 2005, SEC File 333-121781-11, in a $1,793,610,000 offering of mortgage backed securities, five tranches totaling $1,483,410,000 were rated AAA, and another seven tranches totaling $251,650,000 were rated A- or better. The last three tranches, rated BBB+ to BB-, totaled only $58,550,000. So, while there were twelve tranches below the AAA tranches, they totaled only 17% of the offering.

tranche undergirded by the nine lower tranches. Thus, the top tranche would not be affected until 90% of the value had been lost. But, in reality, the picture was similar to a cone. In a $1,793,610,000 offering of mortgage-backed securities by Ameriquest Securities, five tranches totaling $1,483,410,000 were rated AAA, and another seven tranches totaling $251,650,000 were rated A- or better. The last three tranches, rated BBB+ to BBB-, totaled only $58,550,000. So, while there were twelve tranches below the AAA tranches, they totaled only 17% of the offering. This is illustrated below:

![Diagram showing the distribution of tranches with 83% AAA, 14% AA/A- and 3% BBB+/BBB-]

The problem was that by 2007, "[d]eals were flying out so fast that the Wall Street firms sometimes could not tell investors what specific collateral was going into which CDO, making a mockery of anyone who tried to do a fundamental analysis of the assets backing the bonds before agreeing to buy." For example, in February and March of 2007, "Merrill Lynch[] sold $29 billion of the securities, 60% more than in any previous two-month period," leading to the profits and stock price growth previously discussed. Even under the pressure of this volume, the rating agencies were churning out their AAA ratings for securities that, in a

466. Id.
467. Id.
468. Jill Drew, *Frenzy*, WASH. POST, Dec. 16, 2008, http://www.washingtonpost.com/wp-dyn/content/article/2008/12/15/AR2008121503561_pf.html. To hide its exposure to its subprime mortgages, Merrill Lynch created special-purpose entities into which it dumped subprime mortgages. The entities were funded through the issuance of short-term notes to investors that supposedly enabled Merrill Lynch to sell the mortgages and receive cash. But the notes were guaranteed by Merrill Lynch so Merrill Lynch's liability was essentially unchanged. See Louise Story, *Merrill's Risk Disclosure Dodges Are Unearthed*, N.Y. TIMES, Aug. 10, 2010, at B1.
469. Id.
few months, the rating agencies would be downgrading.  
Then came the chain reaction. Apparently, AIG did not need to post collateral as long as it maintained its own AAA rating. But when it was downgraded to AA, it was required to post collateral as the CDOs began to default. As the CDOs were downgraded, more collateral calls came, triggering a liquidity crisis. To complete the picture, as the CDOs dropped in value, the capital of the financial institutions became impaired.

C. CREDIT DEFAULT SWAPS, GOLDMAN SACHS, AND MAGNETAR

There are several issues with the derivatives known as credit default swaps. One is the problem of transparency, or the lack of information not only about volume, but also about the resources, or lack thereof, backing the guarantee. The CDOs are essentially incomprehensible. But neither the underwriter, the buyer, nor the rating agency needed to worry when a AAA business like AIG was guaranteeing the obligation—assuming, of course, AIG had the financial wherewithal to support its guarantee. The problem is similar to that of the mortgage bankers: they did not need to worry about the creditworthiness of the mortgagor if they could sell the mortgages to an investment banker who would securitize them. With respect to the resulting CDOs, neither the underwriter nor the buyer needed to worry as long as the rating agency gave the instrument a AAA rating, and a AAA company like AIG guaranteed the obligation. With no likely liability, no need to perform due diligence! Everybody was making so much money (or so they thought) that nobody needed to worry.

The second issue is that credit default swap is unlike an interest rate swap or currency swap in which a party is trying to hedge its risk from activities, such as the change in interest rates or a change in currency value, over which it has no control. In a credit default swap, the creditor, who is seeking protection from another, is the very person who has the greatest opportunity to assess the risk because the creditor is directly involved in creating the debt instrument. Thus, there is a marked asymmetry in information between the creditor who seeks protection, and who has, or should have done, the due diligence and has the relevant information, and the issuer of the swap who provides protection.

470. See supra text accompanying notes 361–64.
471. Id.
472. Id.
474. See supra note 3 and accompanying text.
475. See supra text accompanying notes 463–68.
In effect, the creditor is buying insurance against the debtor's default. But since this is not treated as insurance, there has, up to now, been no obligation that the guarantor of the debt set aside adequate reserves to fund the expected losses. Unfortunately, companies like AIG assumed that there would be no losses and that the "premiums" were pure profit.

Accordingly, from a policy perspective, should credit default swaps even exist? Just because an "innovative" financial instrument can be created, such as a pick-a-pay mortgage loan, does not necessarily mean that it should be created. While there are those who consider all derivatives gambling, there is no question that interest rate swaps and currency swaps fulfill a useful business function through hedging risks that neither party controls. But to carry forward the gambling analogy, CDSs are gambling with loaded dice since the insured has better data than the insurer.

The market is supposed to effect efficiency. But it is not efficient for both the creditor in a credit default swap and the provider of protection to conduct due diligence. Certainly, we would expect the creditor who made the loan to perform due diligence. When third parties trade CDSs, the likelihood of meaningful due diligence is even more attenuated.

Just like insuring your home, should a purchaser of credit protection have an insurable interest? An unrelated third party could not purchase insurance on your home because of moral hazard: while you do not want your home to burn down, there is no downside to the third party if your home burns, but there is a substantial upside from the insurance payout if your home burns. This is the moral hazard issue. In the financial world, an unrelated third-party can purchase credit default swap insurance. Moreover, if we do not require an insurable interest, there is no limit to the amount of insurance that can be purchased. This is destabilizing because the effect of one obligor's failure is magnified by the number of credit default swaps outstanding on that obligor.

Senator Dorgan had proposed banning "naked credit default swaps," but the proposal ran into stiff resistance.\textsuperscript{478} The argument was made that persons other than a creditor could have a stake in the financial strength of a debtor, such as a supplier or landlord of a business.\textsuperscript{479} This has some superficial plausibility; however, is the market for CDSs composed of suppliers and landlords, or rather speculators? A better argument is that a CDS market does provide pricing information and liquidity. But at what price?

The moral hazard involved in credit default swaps burst into the headlines when the SEC sued Goldman Sachs and an employee, Fabrice Tourre, in connection with a synthetic CDO, Abacus 2007-AC1, which Goldman structured and marketed to investors.\textsuperscript{480} While a CDO is based

\textsuperscript{478} See, e.g., David M. Mason, \textit{The Senator Has No Clothes: Why a Ban on 'Naked' Credit Default Swaps Is Ill-Advised and Impractical}, THE HERITAGE FOUN. (May 5, 2010), http://repoa.heritage.org/wm2887.
\textsuperscript{479} See id.
on the performance of the underlying mortgage-backed securities, a synthetic CDO involves credit default swaps on the underlying mortgage-backed securities.\textsuperscript{481} The person buying protection pays a premium to the provider of protection. Thus, the purchasers of the synthetic CDO would receive their income from the premiums; on the other hand, the person receiving protection would only benefit if the underlying securities defaulted. Thus, the buyer of protection wants the house to burn down.

The SEC's complaint alleged that the offering documents stated that the reference portfolio of residential mortgage-backed securities was chosen by ACA Management, a company experienced in analyzing credit risk in this area.\textsuperscript{482} In point of fact, Paulson & Co. had approached Goldman about creating a synthetic CDO, since Paulson wanted to bet against the subprime market.\textsuperscript{483} Paulson participated in the choice of the mortgage-backed securities against which the investors would provide protection, and then purchased such protection. Consequently, it was in Paulson's interest to choose securities likely to default, or experience what are known as credit events.\textsuperscript{484}

Goldman's "sin" was failing to disclose the role of Paulson. Consequently, the question was whether Paulson's role was a material fact, the omission of which would give rise to liability.\textsuperscript{485} While the reaction of many would be that any investor would want to know if the impetus for creating the investment in question came from someone who wanted the investment to fail, a countervailing argument is that in any credit default swap, there must be a counterparty betting against the swap. Investors cannot get the benefit of selling protection unless there is someone who wants to buy the protection. However, if the buyer had an insurable interest, such that the buyer had a stake if the investment went bad, there would not be the same degree of moral hazard as when the buyer has no stake in the underlying assets, but only believes that they will fail and wants to make money on that gamble.

Just prior to the filing of the SEC complaint against Goldman, ProPublica released a report detailing how one hedge fund, Magnetar Capital, created CDOs from 2006 to 2007 that helped keep the subprime market going.\textsuperscript{486} At the time, there were ominous signs about the housing market, and securitization was becoming more difficult since fewer investors were available to purchase the lower or equity tranches of CDOs.\textsuperscript{487} Magnetar filled this void by purchasing the equity tranches, but then bet

\begin{itemize}
\item \textsuperscript{482} Complaint, supra note 480, at 1–2.
\item \textsuperscript{483} \textit{Id.} at 2.
\item \textsuperscript{484} \textit{Id.}
\item \textsuperscript{485} \textit{Id.} at 20–21.
\item \textsuperscript{486} Jesse Eisinger & Jake Bernstein, \textit{The Magnetar Trade: How One Hedge Fund Helped Keep the Bubble Going}, \textsc{ProPublica} (April 9, 2010), http://www.propublica.org/article/the-magnetar-trade-how-one-hedge-fund-helped-keep-the-housing-bubble-going.
\item \textsuperscript{487} \textit{Id.}
\end{itemize}
against the higher-rated tranches by purchasing credit default swaps.\textsuperscript{488} Since the equity tranche has the highest interest rate, as long as the housing market continued, Magnetar had interest income to cover its premium payments on the CDSs. But when the market crashed, Magnetar was rewarded even more handsomely by its recovery on the swaps.\textsuperscript{489} It profited as the market went up, and it profited many times over when the market fell.\textsuperscript{490}

On July 15, 2010, the SEC announced that Goldman had settled; Goldman agreed to pay a $550 million penalty ($250 million to be returned to two investors and $300 million to be paid to the U.S. Treasury), and acknowledged that it had misstated or omitted key facts:

Goldman acknowledges that the marketing materials for the ABA-CUS 2007-AC1 transaction contained incomplete information. In particular, it was a mistake for the Goldman marketing materials to state that the reference portfolio was "selected by" ACA Management LLC without disclosing the role of Paulson & Co. Inc. [sic] in the portfolio selection process and that Paulson's economic interests were adverse to CDO investors. Goldman regrets that the marketing materials did not contain that disclosure.\textsuperscript{491}

Goldman also agreed to remedial action in connection with its review and approval of mortgage-backed securities, including the use of outside counsel in the review of marketing materials for such offerings and the training of its employees in connection with its business standards.\textsuperscript{492}

D. THE RESPONSE OF DODD–FRANK TO DERIVATIVES

As the current crisis developed, regulators began considering a central clearinghouse to provide some degree of transparency.\textsuperscript{493} As the Comptroller of Currency stated in its 2008 report, "[t]he OCC is working with other financial supervisors and major market participants to address infrastructure issues and credit derivatives, including a central counterparty clearinghouse strategy."\textsuperscript{494} Even the President's 1999 committee report recognized:

[C]learing systems can serve a valuable function in reducing systemic risk by preventing the failure of a single market participant from having a disproportionate effect on the overall market. Clearing systems also facilitate the offset and netting of obligations arising under contracts that are cleared through the system. Because they may serve to concentrate diffuse credit risks in a single entity, however,

\textsuperscript{488} Id.
\textsuperscript{489} Id.
\textsuperscript{490} Id.
\textsuperscript{492} Id.
\textsuperscript{493} See infra note 505 for the approach of Dodd–Frank in this regard.
\textsuperscript{494} OCC 2008 Report, supra note 434, at 6.
clearing systems should be subject to regulatory oversight in order to help ensure that proper risk management procedures are established and implemented and that the clearing system is properly structured.\textsuperscript{495}

Some support had also developed from industry to regulate derivatives and create a clearing authority.\textsuperscript{496} An industry survey reported that "[t]he case is most pressing for credit default swaps,"\textsuperscript{497} which, as stated above, are instruments replete with moral hazard.

As finally enacted, Title VII of Dodd–Frank deals extensively with derivatives.\textsuperscript{498} At the outset of Title VII, the Act explicitly provides that "no federal assistance may be provided to any swaps entity with respect to any swap, security-based swap, or other activity of the swaps entity."\textsuperscript{499} A swaps entity is any "swap dealer, security-based swap dealer, major swap participant, or major security-based swap participant."\textsuperscript{500} This could impact depository institutions. However, a depository institution can establish a subsidiary that is a swaps entity;\textsuperscript{501} it is also permitted to engage in hedging and risk-mitigating activities relating to its business, but not credit default swaps unless they are cleared.\textsuperscript{502} It also gives the Commodity Futures Trading Commission (CFTC) and the SEC authority to issue a report with respect to any type of swap that is determined to be detrimental to the stability of a financial market or to participants in a

\textsuperscript{495} President's Working Grp. on Fin. Mkt., supra note 429, at 14.
\textsuperscript{496} See infra note 506 for the approach of Dodd–Frank in this regard.

- Mandatory clearing of swaps and security-based swaps for those trades that are eligible for clearing as determined by both the clearing houses and the regulators;
- Mandatory trading on an exchange or swap (or security based swap) execution facility should the transactions be cleared and a facility will accept it for trading;
- Public trade reporting of all cleared and uncleared swaps and security-based swaps;
- Regulators have authority to impose capital on dealers and major swap participants;
- Regulators have authority to impose margin requirements only on dealers and major participants for uncleared swaps, adding safeguards to the system by ensuring dealers and major swap participants have adequate financial resources to meet obligations;
- Position limits on swaps contracts that perform or affect a significant price discovery function and requirements to aggregate limits across markets; and
- Prohibitions against market manipulation.

\textsuperscript{499} Dodd–Frank § 716(a).
\textsuperscript{500} Id. § 716 (b)(2).
\textsuperscript{501} Id. § 716(c).
\textsuperscript{502} Id. § 716(d).
financial market. Hopefully, the federal regulators will review the desirability of naked credit default swaps. The Act precludes the regulation of swaps as insurance under state law.

The goal of the Act was basically to improve transparency through public reporting of transaction and pricing data, and to create clearing and margin requirements, which would reduce counterparty and systemic risk. This would be accomplished by centrally clearing as many derivatives as possible, by trading on exchanges, and by subjecting swap dealers and major market participants to capital and margin requirements, both the initial and variation. The Act requires registration of derivatives clearing organizations, swap data depositories, swap dealers and major swap participants, and swap execution facilities.

These provisions will not take effect for 360 days and require extensive rulemaking, particularly by the CFTC and the SEC. The scope of this undertaking is massive. It remains to be seen to what extent derivatives can be standardized so as to be exchange-traded and cleared. One industry professional stated that “[e]very swap transaction is unique, like a snowflake, and you can’t make snowflakes with a cookie cutter.” The determination of capital and margin requirements is left to rulemaking.

503. Id. § 714.
504. Id. § 722(b).
505. Id. § 727 (adding 7 U.S.C. § 2(a)(13)(b)(i)–(iv) (providing for real-time public reporting of cleared swap transactions; with respect to swaps that are not cleared, real-time public reporting is required but in a manner that does not disclose the business transactions and market positions of any person)).
506. Id. § 723 (adding 7 U.S.C. § 2(h) (clearing is mandatory, but the CFTC can determine if a particular swap or category of swap should be cleared; there is also an exception for clearing if; one of the counterparties is not a financial entity, is using the swap to hedge commercial risk, and notifies the CFTC as to how it will meet its financial obligations with respect to swaps).
507. A major market participant is any person who is not a swap dealer and who maintains a substantial position, not held for hedging, and whose outstanding swaps create substantial counterparty exposure, or is a financial entity that is highly leveraged, and not subject to federal banking capital requirements, and who maintains a substantial position in swaps. See id. § 721(a)(16) (adding 7 U.S.C. § 1a(33)).
508. Id. § 731 (adding 7 U.S.C. § 4s(e) (The federal regulators are instructed to adopt rules imposing capital requirements, and initial and variation margin requirements for swaps that are not cleared, for swap dealers and nature swap participants.). For swaps that are cleared, the swaps clearing organization must have core principles that include risk management, which encompasses margin from each member and participant that is “sufficient to cover potential exposures to normal market conditions.” Id. § 725 (adding 7 U.S.C. § 7a-1(c)(2)(D)).
509. Id. § 725.
510. Id. § 728. A swap data repository is a person that collects and maintains information or records with respect to transactions or positions in swap execution facilities, or the terms and conditions of, swaps entered into by others. See id. § 721(a)(21) (adding 7 U.S.C. § 1a(48)).
511. Id. § 731.
512. Id. § 733.
513. Id. § 774 (or “60 days after publication of a final rule or regulation implementing” a provision of Title VII).
But from a standpoint of transparency, the Act is a step in the right direction.

VII. CONCLUSION

Paradoxically, during this past decade a dramatic increase in wealth has also led to a drastic decrease in wealth, as the demand created by the surge in assets under investment sparked the creation and bundling of toxic mortgages, which in turn led to the financial crisis.

Numerous factors coalesced to lead to the meltdown. Borrowers, mortgage brokers, and mortgage lenders combined to create unsound mortgages that were candidates for default. Liars' loans and "affordable" 2/28 mortgages with teaser rates were "manufactured," primarily by non-bank lenders, and sold to GSEs and investment banks to package into securities. Thus, the lender and the investment banker sloughed off their economic risk, and neither had "any skin in the game," which led to an absence of sound underwriting and due diligence.

Had Dodd-Frank been in effect in 2000, this probably would not have occurred. Financial institutions must now make a good faith determination, based on verified documentation, that the borrower can repay the loan on a fully amortized basis, and not based on an initial teaser rate. If the lender or investment bank is not dealing with a "qualified loan," the institution must retain a portion of the risk. Predatory lending should also be mitigated by the oversight of the new Consumer Financial Protection Bureau.

From the standpoint of the lender, the investment banker, and the credit rating agency, more business means more profits, which leads to higher stock prices and greater executive compensation. Thus, management has an incentive to take undue risk. The entire subject of stock options needs to be re-examined, and clawback clauses need to become standard in management contracts to stem short-term opportunism. Dodd-Frank takes a step in this direction, but only a very small one.

Leverage, or phrased differently, inadequate capitalization, is the stuff out of which great fortunes are made. Unfortunately, as the past few years have revealed, it is also the stuff out of which great bankruptcies are made. The problem of excessive leverage has been recognized in Dodd-Frank, but the solution has been left to the regulators. To a certain extent, the Volcker Rule, as embodied in the Act, will cause some separation of trading and banking activities. However, little has been done to stem the concentration of financial power. This has been aggravated by the financial crisis, as failed institutions, such as Countrywide and Merrill Lynch, have been acquired by Bank of America, and Bear Stearns and Washington Mutual by J.P. Morgan Chase. Consequently, institutions that were "too big to fail" before the financial crisis are now even bigger. As Greenspan opined, if they are "too big to fail" they should be broken
The credit rating agencies were probably the most reprehensible players; they held themselves out as guardians of integrity while selling their AAA ratings to make a fast buck. The investment community relied upon the rating agencies to its detriment. Thousands of ratings were dramatically downgraded, sometimes only months after they were issued. The short-term perspective cost the rating agencies a high price since, under Dodd-Frank, they are now highly regulated, compelled to be transparent, and have lost their supposed First Amendment protection against civil liability. However, the problem still remains that the entity that seeks the rating pays the rating agency.

Whether the problems relating to derivatives have been resolved is still an open question. There is a serious moral hazard when the financial institution that creates a debt, or a securitized instrument purchases credit insurance from another entity, such as AIG. Because of the informational asymmetry, the creator of the instrument can insure against its own lack of due diligence. Moreover, when people trade credit default swaps without having interests in the underlying obligation, the effect of default is magnified throughout the system. Whether this risk is offset by liquidity and pricing transparency possibilities is another policy issue that deserves serious concern.

As a result of Dodd-Frank, the derivative business certainly will be more transparent, which is a step in the right direction. But the extent to which derivatives will be cleared and traded on exchanges, with capital and margin requirements to protect counterparties and the economic system, remains to be seen.

Overall, Dodd-Frank is a substantial step in the right direction, but additional steps still need to be taken. The overall key to avoiding financial crises is integrity and courage. The corporate culture needs to reject the ethic reflected in "[l]et's hope we are all wealthy and retired by the time this house of cards falters."516 Moreover, politicians need the courage to stand up to lobbying pressure and do what is necessary to curb the concentration of power in our financial system and management incentives for short-term profits.

515. See Greenspan, supra note 323.
516. See SUMMARY REPORT, supra note 383.
APPENDIX A.

S&P/Case-Shiller Home Price Indices
APPENDIX B.

AMERICA IS ON A PATH TO ECONOMIC RECOVERY

SOURCE: BUREAU OF LABOR STATISTICS 3/19/10