Credit Derivative Destruction and Mortgage-Backed Mayhem: The End of an Era of Deregulation

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Introduction

The “Great Panic” of 2008 was the worst financial crisis since the Great Depression. Its occurrence marked the definitive end of the “Super Bull Market”—the “greatest bull market finance has ever known.” Journalist and author, Andrew Ross Sorkin, remarked, “In a period of less than eighteen months, Wall Street [went] from celebrating its most profitable age to finding itself on the brink of an epochal devastation.” September 15, 2008, the day Lehman Brothers filed for bankruptcy, has the dubious distinction of being the costliest day ever witnessed on Wall Street. Yuval Levin, the editor of National Affairs and a fellow at the Ethics and Public Policy Center, writes, “The crisis had it all: reckless investors, careless lending, irresponsible borrowing, wild speculation, charlatan financiers, signs of under-regulation, retirees losing their life savings, while Wall Street fat cats got their bonuses.”

Metaphorically speaking, if the economy is an automobile, then credit is the gas that fuels the economy and liquidity is the motor oil that lubricates our nation’s economic engine. While both credit and liquidity are “essential” for a smooth-running economy, the predominant concern of bank regulators and financial institutions over the past

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1 JD/MBA from Indiana University-Indianapolis; LL.M. from the Morin Center for Banking and Financial Law at Boston University School of Law.
2 David Wessel, In Fed We Trust, Crown Business, 2009 (The author dubbed the financial crisis that began in the Fall of 2008 the “Great Panic,” and it is used throughout this paper.)
3 By March 9, 2009 (the date of the “bottom” or lowest point in the stock market), the Dow Jones Industrial Average had lost over half its value—its opening value was 6538.85 compared with 11,917.46 on March 9, 2008. This 54.87% loss of value makes it the worst year-to-year decline since the Great Depression); David M. Smick, “A Never-Ending Economic Crisis?” Commentary, January 2010, at 29 (quoting, “In 2008, the global economy experienced a brutal financial retraction not seen since the 1930s. The value of virtually every asset in the world was reappraised downward, led by housing in the United States.”)
5 Andrew Ross Sorkin, Too Big To Fail, Viking, 2009 at 3.
decade, similar to the mindset of most motorists, was to ensure that a sufficient amount of credit existed in the economy’s gas tank. For as long as credit was cheap and widely available and the American economy continued to run, liquidity was ignored.\textsuperscript{8}

Continuing the economy-as-automobile metaphor, an economy without sufficient liquidity is like driving a car that is “losing a quart of oil every mile you drive down the highway. If you don’t fix it, the engine block will crack.”\textsuperscript{9} As the presidency of George W. Bush was coming to a close, Keith Hennessey, a White House staffer, tasked with making the case for a Wall Street bailout to House Republicans, pleaded “Our entire banking system is dramatically undercapitalized. [Banks] bought mortgages and complex securities they didn’t understand…while the core of the problem was mortgages…the underlying problem [now] is that banks don’t have enough capital.”\textsuperscript{10} As liquidity disappeared in September of 2008, the Treasury Department and the Federal Reserve deemed it necessary to “dump tons of liquidity on the market” to prevent a global financial meltdown and the U.S. economy from breaking down.\textsuperscript{11}

The precipitous decline of Bear Stearns and Lehman Brothers made clear just how vulnerable the financial system had become by 2008.\textsuperscript{12} In contrast to the fall of the former investment bank, the demise of Lehman preceded a laundry list of Wall Street failures (and near-failures). The very next day, American International Group (AIG), the

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\textsuperscript{8} David Wessel, \textit{In Fed We Trust}, Crown Business, 2009 at 97 (quoting, “The central bankers knew lubrication was essential but spent most of their time on the gas pedal, tinkering with just how much fuel to give the engine: less when they wanted to slow the economy, more to speed it up.”)

\textsuperscript{9} Id. at 212.

\textsuperscript{10} Wessel, \textit{Id}. \\
\textsuperscript{11} Id.

\textsuperscript{12} Id. at 408-409 (quoting, “Even though, whenever asked, [former Bear Stearns CEO in December of 2007, Jimmy] Cayne had always insisted he would stay at the helm of Bear Stears for years and years, in truth, by the end of 2007, Cayne no longer had the fire in the belly. He also had no idea what to do return the firm to profitability. [Cayne was quoted as saying,] “There was a period of not seeing the light at the end of the tunnel.” “It’s not knowing what to do. It’s not being able to make a definitive decision one way or the other because I wasn’t good enough. I wasn’t good enough to tell you enough to tell you what was going to happen.”)
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world’s largest insurance company with over a trillion dollars in assets, announced that it too would go bankrupt without substantial government assistance.13 Two days after Lehman, the Reserve Primary Fund, a money market fund promising returns just a bit better than the interest paid on a bank savings account, “broke the buck”—meaning its net asset value had dipped below $1 per share.14 Suddenly, even the safety of money markets funds was being questioned—leading some investors to wonder whether putting cash under their mattress wasn’t such a bad idea after all. A modern day run on the banks was underway. In the weeks and months that followed the Lehman bankruptcy, “a global deluge of economic misery” was unleashed resulting in:

The sale of Merrill Lynch to Bank of America before it could fail; the failure of Washington Mutual; the near-failure of Wachovia; the near-failure of National City Bank; the failure of at least 19 other financial institutions nationwide; the conversion of Goldman Sachs, Morgan Stanley and American Express into bank holding companies to stave off their demise; and the virtual incapacitation of Citigroup,15 once the world’s biggest, most valuable, and most powerful global financial services firm.16

The “near collapse of capitalism” was at hand.17 By the end of 2008,18 Americans had lost approximately $8-9 trillion in personal wealth.19 Irrespective of the significant

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15 Francesco Guerrera, Henny Sender and Tom Braithwaite, “TARP Repayment Blow For Citi,” Financial Times, December 9, 2009 at 15 (In exchange for a 34% ownership stake in Citi, the Federal Reserve and the Federal Deposit Insurance Company is insuring $301bn worth of its toxic assets.)
17 Cohan, Id.
18 Note that most major stock indices did hit bottom until March of 2009. Gary D. Halbert, “Is the Worst of the Credit Crisis, Behind Us?” Investor Insight.com, http://www.investorsinsight.com/blogs/forecasts_trends/archive/2008/05/13/is-worst-of-the-credit-crunch-behind-us.aspx (quoting, “The major stock market indexes have been rising nicely since early March.”)
rebound in equity markets since March of 2009,\textsuperscript{20} losses on the stock market and in real estate as of January 2010 were an estimated $13 trillion—an exceptionally devastating loss of wealth when considering that U.S. gross domestic product is roughly $14 trillion.\textsuperscript{21} The equivalent of about a year’s worth of productivity from the world’s leading economic superpower had been eviscerated.

The reverberations of the Great Panic were particularly acute for automakers in Detroit. General Motors and Chrysler, already struggling in headier times, would fail without access to credit from Wall Street. GM and Chrysler could no longer afford to build cars, and their customers could no longer obtain the credit to buy them.\textsuperscript{22} Without government assistance, their imminent doom was a \textit{fait accompli}. To prevent the loss of millions of jobs on Main Street, the federal government again felt compelled to intervene.\textsuperscript{23} Outside of perennially economically depressed Detroit, fallout from the Great Panic threatened once formidable Fortune 500 companies. Speaking to TV-show host Jon Stewart on \textit{The Daily Show}, Andrew Ross Sorkin remarked on the devastating impact that the financial crisis was having on the economy, “There was concern that

\textsuperscript{20} David Wessel, “Wall Street Soars Above Main Street,” Wall Street Journal, October 22, 2009 at http://online.wsj.com/article/SB125616290488299949.html?KEYWORDS=March+2009 (quoting, Wall Street is back. The stock market is up 50% from its March lows. Goldman Sachs and J.P. Morgan Chase, emerging even stronger than before the crisis, are making big profits and paying bonuses. Corporate profits are rebounding. The long, deep recession appears over.”)


\textsuperscript{22} Associated Press, “Automakers Struggle to Survive Past Mistakes,” MSNBC, November 8, 2008 at http://www.msnbc.msn.com/id/27609471/ (quoting, “Democratic leaders in Congress asked the Bush administration on Saturday to provide more aid to the struggling auto industry, which is bleeding cash and jobs as sales have dropped to their lowest level in a quarter-century… But just as the cost cuts started to take hold and new products were rolling out, gas prices rose rapidly to around $4 per gallon and Wall Street collapsed, virtually eliminating credit that 60 percent of car buyers need.”)

\textsuperscript{23} “On the Skids: Are U.S. Automakers Running Out of Time—and Options?” Knowledge@Wharton, October 29, 2008, at http://knowledge.wharton.upenn.edu/article.cfm?articleid=2083 (quoting, “The Big Three U.S. automakers can't seem to catch a break. Demand for their profitable and gas-gulping SUVs evaporated as oil prices surged to record highs through the spring and summer. Now, the global financial crisis is keeping consumers away from showrooms and limiting automakers' access to the credit that helps sustain them.”)
McDonald’s franchisees wouldn’t be able to pay their people…they weren’t just talking about Morgan Stanley and Goldman Sachs going out of business, they were talking about General Electric going bankrupt.”24 As systemic risk spiked and financial institutions became increasingly illiquid or insolvent, individual and institutional investors began panicking, feeding the sell-off—a “deleveraging gone supernova.”25 As of January 2010, residential real estate prices declined 25% since the peak in 2006 leaving homeowners underwater by $745 billion”26—a decline not seen in U.S. housing since the Great Depression.27

Without government intervention, so went the argument, it could have much, much worse—Hoovervilles might have once again dotted the National Mall. Rather than wait for market forces to intervene, governments went into action to prevent financial Armageddon and a crippling world wide depression. Total global fiscal stimulus amounted to $17 trillion—approximately one-quarter of world GDP was injected into financial institutions to prevent a meltdown.28 At the height of the Great Panic in the mid-September 2008, there was fear of a “world in which no one would trade, there would be no credit, and the financial system would come to a halt.” Charles Gasparino continues, “The values of homes, stocks, and everything else would then fall to zero.

28 Phil Mattingly, “Criticism of Fed Could Make Bernanke’s Road to a Second Term Rockier,” CQ Today, December 1, 2009 at 9 (quoting, “After extending loans to faltering companies all along the financial spectrum, the Fed has seen its balance sheet jump above the $2 trillion mark.”)) budget deficits jumped by 737 percent over the previous year”}; Phil Mattingly, “Criticism of Fed Could Make Bernanke’s Road to a Second Term Rockier,” CQ Today, December 1, 2009 at 9 (quoting, “After extending loans to faltering companies all along the financial spectrum, the Fed has seen its balance sheet jump above the $2 trillion mark.”)
Forget the Great Depression. This would be the Greatest Depression.”

The bitter irony of it all: Wall Street, the supposed “epicenter of free markets,” would not survive without the U.S. government and the American taxpayer. Despite the massive bailout, over 200 banks across the United States have since failed.

The cause of all the chaos, wealth destruction and misery inflicted during and after the Great Panic remains a point of contention amongst financial historians, practitioners and regulators—fingers have been pointed in all directions. Other contributors to the Great Panic such as “too big to fail,” the inherent conflict of interest between bond rating agencies and the originators of mortgage-backed securities, “naked” credit default swaps and the role of government-sponsored entities Fannie Mae and Freddie Mac in inflating the real estate bubble are not the focus of this paper. The intention of


30 Gasparino, *Id.* at 474.

31 Dan Fitzpatrick, David Enrich and Michael Crittenden, (quoting, “There have been 77 U.S. bank failures this year, including 32 since July 1. More banks have failed in 2009 than any year since 1992.”) To put this figure in context, only 10 U.S. banks failed between 2003 and 2007.)


33 David Cho, “Banks ‘Too Big to Fail’ Have Grown Even Bigger,” Washington Post, August 28, 2009, (quoting, “When the credit crisis struck last year, federal regulators pumped tens of billions of dollars into the nation’s leading financial institutions because the banks were so big that officials feared their failure would ruin the entire financial system.”)

34 Robert Pozen, *Too Big to Save?*, John Wiley & Sons, Inc., 2010 at 60 (quoting, “The agencies face a fundamental conflict of interest because they are paid by the MBS issuers, but their ratings are supposed to help investors decide whether to buy these same MBS. If an issuer begins discussion with one rating agency that appears to be leaning against a top rating, the issuer can simply take its business to another agency.”) and at 67 (quoting, “In theory, investors should pay for credit ratings instead of bond issuers. This would eliminate the most fundamental conflict of interest in the rating industry.”)

35 *Id.* at 60 (quoting, “As one Moody’s executive said in an internal memo about these downgrades: ‘These errors make us look either incompetent at credit analysis, or like we sold our soul to the devil for revenue.’”)

this article is first to explain the role of mortgage-backed securitization (MBS)\textsuperscript{37} in warping lending standards, increasing leverage and ultimately destabilizing financial institutions. When housing prices fell, interest rates reset and defaults skyrocketed, the billions in MBS Wall Street had stockpiled were suddenly illiquid. The solvency problems created by MBS in combination with losses on credit default swaps helped to badly destabilize the financial system. All of which was occurring in the absence of regulatory oversight. Secondly, this essay provides a concise history of financial regulation in the 20\textsuperscript{th} century. Third, the essay makes the argument that deregulation is unacceptable in light of recent history. Lastly, the essay aims to provide guidance for the future regulation of securitization and over-the-counter derivatives.

I. **Mortgage-Backed Securities and Credit Derivatives Sow the Seeds of Destruction on Wall Street**

One clear cause of the Great Panic was mortgage backed securities collateralized by subprime mortgages and the credit swaps insuring against their default. Taken to the extreme, Wall Street’s manipulation of the long-cherished American Dream of the four bedroom house with the white picket fence helped to thoroughly congest the arteries of the financial system. The ultimate intent of Wall Street banks securitizing mortgages was not to put every American family of modest means into a four bedroom home. Rather, the motive of banks securitizing home mortgages was, not surprisingly, pecuniary in

\textsuperscript{37} Please note I am using the term MBS broadly to include the wide variety instruments collateralized by mortgages including collateralized debt obligations.
nature. While real estate continued to rise in value, originating the mortgages underlying them produced a bevy of fees—boosting earnings to meet quarterly guidance estimates.

A. The Rise and Fall of Mortgage-Backed Securities

i. The Ascendance of MBS

For more than the past two decades, the U.S. government in conjunction with Wall Street sought to encourage Americans, rich and poor, to own a piece of the American Dream. With interest rates low and housing prices rapidly appreciating those who had never owned property boldly ventured into the U.S. housing market. The lure of home ownership in combination with compensatory incentives born on Wall Street pushed up the price of homes even in the worst U.S. real estate markets like Detroit, Michigan. Harvard professor and author, Niall Ferguson writes, “In the space of ten years, house prices in Detroit—which probably possesses the worst housing stock of any American city other than New Orleans—had risen by nearly 50 per cent; not much compared with the nationwide housing bubble (which saw average home prices rise 180 per cent), but still hard to explain given the city’s chronically depressed economic state.”38 For a time, U.S. consumers embraced securitization even if they had little idea what had made the cost of borrowing so painless (at least initially).

In the decade leading up to the Great Panic, securitization took preeminence over the traditional and less profitable “business of banking.”39 Securitization enabled those with


bad credit to get loans that they could afford at least initially. Andrew Ross Sorkin writes, “Cheap credit had been the economy’s rocket fuel, encouraging consumers to pile on debt—whether to pay for second homes, new cars, home renovations, or vacations.” From 2000 to 2006, securitization increased 230 percent. The term “securitization” refers to the bundling of different types of debt and dividing the bundle into tranches (the French word for slice) based on risk and maturity. The mortgage-backed security was the very first debt instrument to be securitized. A relatively simple explanation of their creation also serves to demonstrate how complexity and opacity were bred into these securities:

Thousands of mortgages were gathered into mortgage pools. The returns on these pools were then sliced into a hierarchy of tranches that were sold to investors as separate classes of securities…But the process didn’t stop there. Some of the tranches from one mortgage pool were combined with tranches from other mortgage pools…Other tranches were combined with tranches from completely different types of pools, based on commercial mortgages, auto loans, student loans, credit card receivables, small business loans and even corporate loans…Each time these tranches were mixed together with other tranches in a new pool, the securities became more complex.

credit quality transformation: banks can hold assets that are longer and riskier than their liabilities, because their deposit liabilities are sticky. Depositors sleep well knowing that they can always get their money at par, but because they do, they don't actually ask for their money, affording bankers the opportunity to redeploy that money into longer, riskier, higher-yielding assets that don't have to trade at par.”

40 Andrew Ross Sorkin, Too Big To Fail, Viking, 2009 at 87; The Digerati Life—Money and Personal Finance Blog in Silicon Valley, October 6, 2006 at http://www.thedigeratilife.com/blog/index.php/2006/10/06/house-rich-cash-poor/. (quoting, “One financial blogger provides the example of 24-year-old Casey Serin: Who had bought 8 houses in 8 months to cash in on the real estate boom. All with no money down!…The lenders and credit card companies will always love a guy like this because when they hit it big, they do so big time. And as they say, the more you play, the more you strike out, but that homer can just be around the corner…All this doesn’t change the mess he’s in right now: house rich and cash poor. Too bad interest rates got him before he could unload. And it ain’t his fault this happened. Blame the system — the kid is 24 YEARS OLD with no job and nothing to his name and yet the system still manages to hand over a bunch of houses to this newbie. Where are the regulations for this sort of thing? Anyone could have predicted this disaster from the point of its conception.”)


42 Ferguson, Id. at 261 (quoting, “The first issue of this new kind of mortgage-backed security (known as a collateralized mortgage obligation) happened in June 1983. It was the dawn of a new era in American finance.”)

Securitization transformed pedestrian forms of debt like home mortgages, credit card balances and auto loans into instruments tradable on Wall Street. By selling them to asset-backed securities originators, the loans could be moved off the balance sheet of the local banks making the loans. With cash in hand, banks could make more loans, and the securitization cycle would repeat itself. As long as demand for mortgage-backed securities remained high, the risk of default for those originating the loans was nil.

The primary purpose of securitizing mortgages, particularly risky subprime mortgages, was to recombine them in such a way so as to convince credit-rating agencies to bestow a triple-A, investment-grade credit rating on the MBS. With the triple-A rated blessing of rating agencies, MBS could then be sold to a wide variety of institutional investors all over the world looking for “a very conservative investment” that paid better than 5-Year Treasury bonds.

[For legal and accounting purposes, Wall Street firms created special purpose entities (SPE) to act as “shell corporations” for the sole purpose of buying mortgage loans used to create mortgage-backed securities. In headier times, the banks “who dealt directly with the borrowers and knew their economic circumstances,” were exposed to the least amount of risk given that these riskier mortgages could be excised off bank balance sheets by selling them the very same day to other banks that would securitize them. In any case, they were off

44 Niall Ferguson, The Ascent of Money, Penguin Books, 2008 at 260; Charles Gasparino, The Sellout, Harper Business, 2009 at 15 (quoting, “The objective [of securitization]: to get banks to take the loans off their books and sell them to Wall Street, which would then sell them to investors so the banks could keep making more loans.”)
45 Robert Pozen, Too Big to Save?, John Wiley & Sons, Inc., 2010 at 58 and at xiv (quoting, “Mortgage-backed securities were in great demand in early 2005 because they paid higher rates than the 4 percent available on 5-year U.S. Treasuries, and their triple-A ratings indicated a very conservative investment. Only a handful of public companies had triple-A ratings in 2005.”)
46 Id. at 51 (quoting, “Wall Street banks have every incentive to buy assets through SPEs, which can pay for those assets by borrowing from investors through the sale of MBS. Because the assets and debt of SPEs are off the balance sheet of the Wall Street bank, they are not generally counted for purposes of calculating in capital requirement.”)
47 Niall Ferguson, The Ascent of Money at 270 (quoting, “They could make a 100 per cent loan-to-value ‘NINJA’ loan (to someone with No Income No Job or Assets) and sell it on the same day to one of the big banks in the CDO business. In no time at all, the risk was floating up a fjord.”); Michael Lewis, The Big Short, at 97 (quoting, “Long Beach Savings…specialized in asking homeowners with bad credit and no proof of income to accept floating-rate mortgages…In Bakersfield, California, a Mexican strawberry picker
the balance sheet—meaning that the capital requirements enforced under MBS contracts were hidden from view.\footnote{Robert Pozen, Id. at 51.}

Given the highest possible credit rating, MBS became extremely popular on Wall Street. By the middle of the decade, Wall Street would begin drinking its own Kool-Aid to improve earnings.\footnote{Charles Gasparino, The Sellout, Harper Business, 2009 at 165 (quoting, “Merrill [Lynch] had begun to increase its own holdings of mortgage-backed bonds, particularly high-yielding CDOs, pocketing the carried interest to boost earnings.”)} MBS that could not be sold were simply kept on the balance sheet for the “carried interest.”\footnote{Charles Gasparino, The Sellout, Harper Business, 2009 at 158.} Relative to U.S. treasury bonds, the high yields and their faith in the ability of securitization to hedge risk (represented by the triple-A credit rating) justified the decision of many large financial institutions to hold billions of toxic MBS on their balance sheets. Relying upon optimistic computer models\footnote{Charles Gasparino, The Sellout, Harper Business, 2009 at 16 (quoting, “The bonds became more complex and packed with riskier mortgages, for which home buyers paid higher rates of interest that were funneled through to investors, who demanded higher yields. The trades became more complex and larger, based on computer models that allegedly reduced risk to the bare minimum. Where would it all end? No one seemed to care.”)} that reaffirmed that their hedging strategies would minimize the risk of a downturn in real estate markets, financial institutions chose to borrow at short term, low interest rates on the repo market\footnote{Charles Gasparino, The Sellout, Harper Business, 2009 at 245-6 (quoting, “By 2006 mortgage-backed issuance reached $1 trillion, and that didn’t count the $500 billion of CDOs sold that year and into 2007. Many of those bonds couldn’t have been sold unless Wall Street firms had gobbled them up and hidden}} as a means of gorging themselves on “mountains of mortgage-backed assets”\footnote{Andrew Ross Sorkin, Too Big To Fail.} in order to preserve the subprime mortgage origination industry, which fueled the MBS market.\footnote{Michael Lewis, The Big Short at 169 (quoting, “It was easy to understand why originators…preferred to make these sorts of loans…To them the default was a matter of indifference, as they kept none of the risk of the loan; the refinance was merely a chance to charge the borrower new fees.”)}
Later when the volume of mortgage origination began to decline, securitization devised the synthetic CDO to create high-risk mortgagors out of whole cloth—anything to keep the securitization industry in business. When the bubble began to burst, few on Wall Street seemed to grasp the severity of a decline in housing prices. One mortgage-backed trader at Citigroup stated rather nonplussed, “We’ll just warehouse the bonds. The problem will correct itself.”

ii. *The Real Estate Bubble Bursts: The Fall of Securitization*

Mid-Victorian philosopher and founder of *The Economist*, Walter Bagehot, wrote in the late 19th century, “The business of banking ought to be simple. If it is hard it is wrong.” By the middle of the last decade, securitization had become fraught with complexity. By 2007, Lewis Ranieri, “the godfather of the mortgage-backed security,” expressed concern that “the proliferation of risky mortgages and the convoluted ways of financing them. Too many investors don’t understand the dangers…the problem, he says, is that in the past few years the business has changed so much that if the U.S. housing market takes another lurch downward, no one will know where all the bodies are buried.” Speaking at a conference, Ranieri, the inveterate MBS trader, admitted, “‘I don’t know how to understand the ripple effects throughout the system today’” given that so many mortgages, packaged by Wall Street, have been “sold in slices to investors all over the world.” Treasury Secretary Tim Geithner, then-President of the Federal Reserve Bank of New York, warned similarly that same year: “We’ve seen substantial change in

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the financial system with the emergence of a very large universe of leveraged private funds, rapid growth in exposures to more complicated and less liquid financial instruments, all during a period of very low volatility. This means we know less about market dynamics in conditions of stress…the real test, of course, will be when a crisis hits, whatever the crisis may be.”58

The ease with which lenders could sell their loans to other financial institutions, which would then repackage these loans into mortgage-backed securities, caused lending standards to decline dramatically.59 Financial institutions encouraged lenders to make loans to “anyone capable of signing on the dotted line”—fueling a dramatic increase in real estate values and the size of securitization industry.60 Except for a few contrarians,

58 Id., at 317 (quoting a New York Times article entitled “Calm Before and During a Storm.”)
59 Michael Lewis, “Betting on the Blind Side,” Vanity Fair, April 2010 at 136. (quoting, “But as early as 2004, if you looked at the numbers, you could see the decline in lending standards. In [highly successful stock-market investor and hedge-fund manager] Burry’s view, standards had not just fallen but hit bottom. The bottom even had a name: the interest-only negative amortizing adjustable-rate subprime mortgage. You, the homebuyer, actually were given the option of paying nothing at all, and rolling whatever interest you owed the bank into a higher principal balance. It wasn’t hard to see what person might like to have such a loan: one with no income…The borrowers will always be willing to take a great deal for themselves. It’s up to the lenders to show restraint, and when they lose it, watch out’…In [Burry’s] quarterly letters he coined a phrase to describe what he thought was happening: ‘the extension of credit by instrument.’ That is, a lot of people, couldn’t actually afford to pay their mortgages the old-fashioned way, and so the lenders were dreaming up new financial instruments to justify handing them new money.”); Charles Gasparino, The Sellout, Harper Business, 2009 at 158 (quoting, “As securitization grew, banks could lend more, and with banks flush with so much capital, lending standards started to fall even more. People didn’t even have to show documentation that they had to qualify for a loan. People on welfare showed phony documentation that they had jobs to qualify for a loan. Many brokers, content to make a quick buck and pressured to find more and more customers, simply looked the other way.”)
60 Andrew Ross Sorkin, Too Big To Fail, Viking, 2009 at 4; Niall Ferguson, The Ascent of Money, Penguin, 2008, at 233-34 (quoting, “American owner-occupiers owed a sum equivalent to 99 per cent of US gross domestic product by the end of 2006, compared with just 38 per cent fifty years before. This upsurge in borrowing helped to finance a boom in residential investment, which reached a fifty-year peak in 2005.”); Malcolm Gladwell, “The Sure Thing,” The New Yorker, January 18, 2010 at 26 (quoting, “By 2004-2005, [prescient hedge fund manager, John] Paulson was increasingly suspicious of the real-estate boom. He decided to short the mortgage market, using a financial tool known as the credit-default-swap, or C.D.S….Throughout the boom, countless bank and investment firms sold C.D.S. policies on securities backed by subprime loans, happily pocketing the annual premiums in the belief that there was little chance of ever having to make good on the contract. Paulson, as often as not, was the one of the other side of the trade…By the time the crash came, he was holding insurance on some twenty-five billion dollars’ worth of subprime mortgages…In 2006…it was unclear whether rising housing prices represented a bubble or a legitimate phenomenon. [Paulson’s associate, Paolo] Pellegrini concluded that housing prices had risen on
few on or off Wall Street at the height of the bubble recognized that the next crisis would be centered upon the U.S. housing market. The Great Panic was the culmination of a two-year decline in real estate producing a cascade of defaults. The drop in home values in formerly high growth, sun-belt states was “the sharpest...since the 1930s.” The decline helped to cause “the worst financial crisis in 80 years, bank failures across the land, the longest recession since the Great Depression, towering unemployment, and economic misery for millions.”

As the real estate bubble burst, teaser interest rates on mortgages began to reset higher beyond the reach of mortgagors with “weak credit histories,” and the economy continued to shed hundreds of thousands of jobs, defaults increased and home foreclosures skyrocketed. What once had been a predicament of borrowers became particularly problematic for lenders and for those selling CDS on those mortgage-backed

average between 1.4 per cent annually between 1975 and 2000, once inflation had been accounted for. In the next five years, though, they had risen seven per cent a year—to the point where they would have to fall by 40 per cent to be back in line with historical trends. That fact left Paulson certain that he was looking at a bubble.”

Charles Gasparino, The Sellout, Harper Business, 2009 at 239 (quoting, “Both had been among the few—the very few—who had believed the housing boom at its height back in 2005 was nothing more than a speculative bubble that was about to sink the U.S. economy...[economist Nouriel] Roubini had approached his research in macroeconomic terms: the wages of average Americans had stagnated for decades while they were able to build false wealth through borrowing and buying homes. The irrational exuberance of housing prices wouldn’t—couldn’t—last forever, because no bubble ever does.”)

Robert Pozen, Too Big to Save? John Wiley & Sons, Inc., 2010 at 60 (quoting, “As subprime mortgages began to default in 2007, the credit-rating agencies unleashed a flood of credit downgrades for MBS backed by subprime mortgages.”)


Robert J. Samuelson, “Bubbles, Bubbles, Toils and Troubles,” Claremont Review of Books, Spring 2010 at 43 (quoting, “With hindsight, many home loans packaged into mortgage-backed securities seem absurd. Borrowers had weak credit histories—documentation of their incomes was sometimes missing—and after low ‘teaser’ rates for two or three years, loan rates would rise to clearly unaffordable levels. But there was a logic to this madness, and it derived from the heady, post-inflationary era. Home prices had consistently appreciated—and, it was argued, would continue appreciating. If so, borrowers could refinance their loans after two or three years at lower rates, because their homes would be worth more and loans would be safer to lenders.”)
bonds.\textsuperscript{66} When the U.S. housing market unexpectedly suffered its worst decline since the Great Depression, many mortgagors were either badly underwater or completely incapable of making payments. For financial institutions sitting on billions worth of mortgage backed securities, losses on sell-side credit derivatives steepened as defaults increased, further compounding the financial crisis. Rising defaults and declining housing prices effectively killed securitization—the profit centers of Lehman Brothers, Bear Stearns, Merrill Lynch and Citibank—and the lending opportunities that goes along with it. But worse than that, without new mortgages to package into MBS, the housing market would collapse, wiping out much of the MBS being warehoused on Wall Street.\textsuperscript{67} As Wall Street counterparties lost confidence in MBS, banks like Bear, Lehman and Citi could no longer borrow on the repo market—effectively shutting down their trading desks.\textsuperscript{68} But this was only the beginning: rumors about solvency would spread to the bank’s corporate clients, who no longer wanted to do business with these tainted banks, and to depositors who began withdrawing from their accounts. Securitization was a good thing for the U.S. economy until it was merely creating the illusion of wealth creation—encouraging consumers and financial institutions to borrow against these illusory gains.

Lured by the promise of short-term profits and larger bonuses, both “bankers and investors [took] enormous risks without due regard for their consequences.”\textsuperscript{69} With so much of the U.S. economy’s future dependent on the value of real estate, the collapse of securitization which triggered the widespread collapse in financial markets proved

\textsuperscript{66} Robert Pozen, \textit{Too Big to Save?}, John Wiley & Sons, Inc., 2010 at 72 (quoting, “When the pools with subprime mortgages began to default at unexpectedly high rates in 2007, the value of the CDS to the buyers increased as the value to the insurance companies decreased.”)


\textsuperscript{68} Charles Gasparino, \textit{The Sellout}, Harper Business, 2009 at 482.

especially painful to underwater home owners, Wall Street firms and Main Street businesses relying on a consistent access to credit. The growing complexity of securitization had encouraged speculation by disguising risk. Securitization became especially problematic when applied to riskier, subprime loans—the risk of which had been spread far and wide around the globe to “those least able to understand it.”

Michael Lewis writes, “The subprime-mortgage market had a special talent for obscuring what needed to be clarified.”

Subprime-mortgage bonds were branded “asset-backed securities” or “A.B.S.”s. For example, at Deutsche Bank, if one were to inquire what assets secured a particular A.B.S., a potential investor would receive an almost inscrutable list of acronyms such as R.M.B.S., HELs, [and] HELOCs. Whatever they were, the rating agencies gave them their seal of approval by bestowing a triple-A rating investment grade on these highly complex mortgage-backed securities. For a time, complexity and risk were ignored, and investors happily collected coupon payments earning 200 basis points (2%) better than treasury bonds. The degree to which institutional investors like pension fund managers were unwittingly being fed toxic mortgage-backed securities brings to mind early 20th century meat packing plants as

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70 Ferguson, Id. at 270; Mattingly, Id. at 2938-2939 (quoting, “Credit was extended far and wide, and risk was just as widely dispersed, allowing financial markets to move at a faster and smoother pace.”)
72 Lewis, Id.
73 Robert Pozen, Id. at 49 (quoting, “The attractiveness of [mortgage-backed securities] to investors is enhanced by their top rating.”)
74 Charles Gasparino, The Sellout, Harper Business, 2009 at 16-17 (quoting, “Given the spectacular nature of their business, [Solomon Brothers trader Pat] Dunlavy was most proud that the business didn’t lose any money. ’[The number two executive at Solomon Brothers in 1983] Tom [Strauss], we had a pretty good quarter,’ Dunlavy said. ‘We cut back on our risk position dramatically. We’re in good shape, and most of all we have lost any money. It’s amazing!’ Dunlavy was expecting promises of a big bonus…What he got, instead, was a bucket of cold water thrown right in his face. ‘Well, if you’re telling me you haven’t had a loss yet, that doesn’t make me happy. All that means is you’re not taking enough risk.’”)
75 Paul J. Lim, “The Hidden Danger in Your Portfolio (and what to do about it),” Money, June 2010 at 77 (Note: a “coupon” is the interest payment on a bond.)
76 A “basis point” is one hundredth of one percent. http://www.merriam-webster.com/netdict/basis%20point.
described in Upton Sinclair’s *The Jungle* that produced rancid meat products for unwitting customers.\(^77\)

In the years leading up to the Great Panic, “the housing boom began to price families out of the market.”\(^78\) For low income families and those with bad credit, the CDO was devised by the mortgage industry to make “the unaffordable affordable.”\(^79\) While temporarily increasing homeownership (or the debt-laden illusion of it), the introduction of the CDO would fuel the housing bubble to its boiling point. The subprime mortgage origination industry much to thank the financial engineers at Merrill Lynch and Citibank that had created the CDO. To form the infamous collateralized debt obligation, subprime loans with the greatest default risk were packaged into the highest-risk equity tranches. Owners of the equity tranche received a higher interest rate, but such payments of interest and principal were contingent upon all other tranches being satisfied first.\(^80\) The higher interest rates (as compared to triple-A rated Treasury bonds) combined with the triple-A rating made them attractive to institutional investors.

Discussing the illiquidity of CDOs as housing markets declined and investors got scared, Charles Gasparino succinctly writes, “The history of bond market panics is pretty simple: when markets begin to tank, the most complex bonds can’t be priced and can’t be

\(^77\) Upton Sinclair, *The Jungle*, 1906 (quoting, They were regular alchemists at Durham’s; ....They advertised "potted chicken," the things that went into the mixture were tripe, and the fat of pork, and beef suet, and hearts of beef, and finally the waste ends of veal, when they had any. They put these up in several grades, and sold them at several prices; but the contents of the cans all came out of the same hopper. And then there was "potted game" and "potted grouse," "potted ham," and "deviled ham"-- de-yled, as the men called it. "De-yled" ham was made out of the waste ends of smoked beef that were too small to be sliced by the machines; and also tripe, dyed with chemicals so that it would not show white; and trimmings of hams and corned beef; and potatoes, skins and all; and finally the hard cartilaginous gullets of beef, after the tongues had been cut out. All this ingenious mixture was ground up and flavored with spices to make it taste like something.


\(^79\) Gasparino, *Id.*

\(^80\) Robert Pozen, *Too Big to Save?*, John Wiley & Sons, Inc., 2010 at 49 (quoting, “For instance, one high-risk, high-yield tranche of a MBS might absorb the first loss on mortgages in the pool, while another low-risk, low-yield tranche might receive the first payments of interest and principal from these mortgages.”)
sold. And there was nothing more complex than the CDO.”\(^{81}\) So-called “toxic” collateralized debt obligations were devised of the riskiest equity tranches. While triple-A ratings had implied that CDOs were nearly riskless investments, CDOs created from 2005-2006 were anything but risk-free. Having enticed investors with attractive high yield coupons and a triple-A credit rating, CDO issuance increased more than 700 percent in the last decade.\(^{82}\) As real estate prices fell from 2006-2008, these CDOs went bust *en masse*.

In 2006, the decline in real estate prices and subsequent rise in mortgage defaults in the United States proved without a doubt that securitization could be destabilizing.\(^{83}\) As confidence in securitized instruments evaporated, lending by and between banks froze. The initial casualties were long-standing investment banks, Bear Stearns and Lehman Brothers.\(^{84}\) Businesses and individuals on Main Street shut off from once dependable sources were now struggling to survive. Wall Street’s embrace of securitization was predicated upon the faulty assumption that the U.S. housing market would continue to appreciate in value and markets for mortgage-backed securities would remain highly liquid.\(^{85}\)

At the height of the real estate bubble, financial institutions created new ways of enticing people with bad credit to buy homes. One such mortgage product was the


\(^{83}\) Phil Mattingly, “Securitization’s Risks and Rewards,” CQ Weekly, December 28, 2009 at 2938 (quoting, “In the lexicon of 21\(^{st}\) century finance, ‘securitization’ is a term of art that once evoked brilliance and finesse and today is damned as a root cause of the financial crisis of 2007-08 and the resulting global recession.”)

\(^{84}\) Michael Lewis, *The Big Short*, at 167 (quoting, “Cornwall Capital couldn’t help but notice that Bear Stearns was not so much shaping the subprime mortgage bond as being reshaped by it. ‘They’d turned themselves from a low-risk brokerage operation intoa subprime mortgage engine’…If the subprime mortgage market crashed, Bear Stearns was going to crash with it.”)

adjustable-mortgage known as an ARM, which enabled interest rates and principal payments to be kept artificially low during the first few years before growing to “immense proportions.” Just as the U.S. economy began to falter and housing prices continued to decline, teaser rates on ARMs began expiring helping to fuel a wave of defaults and foreclosures. This initial wave of defaults would eventually produce a tsunami on Wall Street that would take out two of the most venerable investment banks.

By necessity, Wall Street operates on trust, which “in a world of instant communication…can be eroded instantly.” Such a “crisis of confidence” in 2008 produced a devastating “meltdown” in the financial system. Walter Bagehot famously remarked, “Every banker knows that if he has to prove that he is worthy of credit, however good may be his arguments, in fact his credit is gone.” Given the risks involved and the tremendous leverage involved, maintaining confidence by and between Wall Street counterparties is critical. David M. Smick writes, “The definition of liquidity comes down to one word—confidence.” In 2008, confidence was overtaken by fear. Former Bank of America CEO, Ken Lewis, noted at the height of the crisis, “Any one of

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87 Niall Ferguson, *Id.*, at 10 (quoting, “What followed a resembled a slow but ultimately devastating chain reaction. All kinds of asset-backed securities, including many instruments not in fact backed with subprime mortgages, slumped in value. Institutions…found themselves in severe difficulties…Having suffered enormous losses, many of the best-known American and European banks had to turn not only to Western central banks for short-term assistance to rebuild their reserves but also to Asian and Middle Eastern sovereign wealth funds for equity injections in order to rebuild their capital bases. But by early 2008 foreign investors were losing their appetite for bank stocks that persistently declined in price.”); Ferguson, *Id.* at 271 (Noting that in many states in the U.S., home mortgages are “no recourse loans.” Thus when a default occurs, lenders can only seize the property—garnishing future wages or go after other assets like an automobile or a checking and savings account. Some economists argue that “no recourse loans” encourage foreclosure.”)
88 Cohan, *Id.*, at 18.
89 “A Never-Ending Economic Crisis?” Commentary, January 2010 at 34.
us that doesn’t have a healthy fear of the unknown isn’t paying attention.” Morgan Stanley chairman John Mack, speaking to his employees at the height of the crisis, “We deal in a market today [in which] financial chicanery, rumor, and innuendo are much more powerful than results.” An excess of fear in markets destroys trust between counterparties, eliminates access to short term credit markets and creates liquidity crises for the most highly leveraged financial institutions. One Wall Street insider, Gordon S. Murray, noted “When transactions occur between these sophisticated counterparties…it is based on trust.” Meredith Whitney, a well-respected Wall Street research analyst, perceptively warned about the loss of confidence between Wall Street counterparties in March of 2008, “If the counterparties are an issue, meaning ‘I don’t trust you and you don’t trust me,’ and there’s no liquidity in the system and we’re already careening towards a pretty significant recession, if this happens, then we go into a recession.”

During the Great Panic, perceptions about the looming insolvency of many Wall Street institutions, erroneous or not, became self-fulfilling.

Mortgage backed securities became difficult to value: “When the housing bubble burst and house prices began declining, borrowers began to default, the lower tranches [i.e. equity and higher risk debt tranches] were hit with losses, and higher tranches became more risky and declined in value.” In other words, those supposedly triple-A-rated tranches no longer felt safe at almost any price. As of May 2010, mortgage-backed

91 Andrew Ross Sorkin, Too Big to Fail, 2009, at 431.
92 Gordon S. Murray, “Presentation to Congress,” March 11, 2010 at 4. Mr. Murray had a 25 year career on Wall Street working for Goldman Sachs, Lehman Brothers and Credit Suisse First Boston.
94 Cohan, Id., at 21; Malcolm Gladwell, Outliers, Little Brown, November 2008 (citing Robert Merton, who coined the term “self-fulfilling prophecy” and defined it as a situation in which “a false definition, in the beginning…evokes a new behavior which makes the original false conception come true.”)
securities markets remain in tatters. Excluding the participation of government-sponsored enterprises like Fannie Mae and Freddie Mac in mortgage-backed securities markets, “there has not been a privately financed mortgage-backed security in two years.”

Global asset-backed securities (ABS) markets that include MBSs are experiencing the lowest trading volumes since 1995, and the value of ABS markets has diminished by 90% since 2007. Aline van Duyn, writing for the Financial Times, ponders whether the current “lack of securitization and structured finance is a factor that [will] curb future recoveries.” Perhaps, the evisceration of mortgage-backed securities markets is good news as it demonstrates that financial institutions and investors alike have gained greater appreciation for the risks posed by complex mortgage-backed instruments. On the other hand, memories (even those involving the loss of billions of dollars) are short, and in the absence of regulation it is conceivable that securitization will once again rebound fueling the next housing bubble.

The term “underwater” refers to the fact that many homeowners, particularly those that bought housing at the height of the bubble, owe more in principal than the property is currently worth—the homeowner holds negative equity. Recent studies have shown that the higher the mortgagor’s negative equity, the greater the likelihood of default.

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96 Aline van Duyn, “Goldman Shadow Hangs Over Push to Revive Securitisation,” Financial Times, April 21, 2010 at 25 (quoting, “Like other parts of capital markets, demand for securities backed by mortgage and other loans dried up completely after the collapse of Lehman Brothers.”)
97 Van Duyn, Id. at 25.
98 Van Duyn, Id. at 25.
100 John Gittelsohn and Prashant Gopal, Id. at 28.
101 Gittelsohn and Gopal, Id. at 28 (quoting, “‘The evidence is irrefutable,’ Laurie Goodman, senior managing director of Amherst Securities Group in New York, testified before the U.S. House Financial Services Committee on Dec. 8. ‘Negative equity is the most important predictor of default.’”)
irrespective of whether the mortgagor can afford to make payments. In most states, when a mortgagor defaults, the depreciated asset becomes the property of the lender through the process of foreclosure. The increase in foreclosures is “the fuel behind hundreds of billions of dollars in losses for bank and investors around the world—owners either of the defaulted mortgages themselves or of securities linked to their value.”

Pervasive “investor discontent” was killing securitization. In response, financial institutions suddenly needed to divest themselves of MBS. The market was full of sellers and no buyers. MBS were viewed suspiciously, and securitization declined sharply.

Initially even as defaults increased slightly and housing prices were tanking, the vast majority of MBSs continued to perform. Perception between counterparties on

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102 Aline Van Duyn, “‘A Business Decision,’” Financial Times, February 23, 2010 at 7 (consider the example of “Wayne B., a 62-year-old executive…and his wife Orapin….have decided to default on their $500,000 mortgage on a townhouse in Livermore, a respectable city in California’s San Francisco Bay area. It is not that they are unable to afford the $4600 monthly mortgage outgoings: they have never missed a payment….’The loss if we sell will be so large that, after doing a lot of research, we have made a business decision to walk away.”)


104 Robert Pozen, Too Big to Save?, John Wiley & Sons, Inc., 2010 at at xvii (quoting, “As the default rates reached record highs, investors in the mortgage-backed securities with even the most conservative ratings suffered heavy losses. Because of widespread investor discontent, the volume of securitization of all loans plummeted from $100 billion per month in 2006 to almost zero in late 2008.”)

105 James R. Hagerty, “Ten Questions on the Volatile Housing Market,” Wall Street Journal, A21, November 19, 2009, (Noting that the average prices of homes in the U.S. have declined by 30% on average. In real estate markets hardest hit like Las Vegas and Miami, home values have depreciated by 53% and 39% respectively. Currently in Miami, approximately a quarter of all households with mortgages are behind in their payments or are in foreclosure.)

106 William D. Cohan, House of Cards., at 5, (The author offers the example of Thornburg Mortgage that was forced to significantly write down the value of its Alt-A mortgages (less risky than subprime and marginally more risky than prime mortgages), despite the fact that only .44% of its $24.7 billion mortgage portfolio were non-performing); http://www.tmstcorp.com/, (In May of 2009, Thornburg Mortgage filed for Chapter 11 bankruptcy.); Also See, Ruth Simon and James R. Hagerty, “One in Four Borrowers is Underwater,” Wall Street Journal, November 24, 2009, http://online.wsj.com/article/SB125903489722661849.html, (quoting, “Mortgage troubles are not limited to the unemployed. About 588,000 borrowers defaulted on mortgages last year even though they could afford to pay -- more than double the number in 2007, according to a study by Experian and consulting firm Oliver Wyman. ‘The American consumer has had a long-held taboo against walking away from the home, and this crisis seems to be eroding that,’” the study said.”); Mark Whitehouse, “American Dream 2: Default, Then Rent,” Wall Street Journal, December 10, 2009, http://online.wsj.com/article/SB126040517376983621.html (quoting, “It’s just a better life. It really is,”)
Wall Street, however, was that the vast majority of MBSs were “toxic waste”—financial instruments that could not be priced with any confidence, which nobody wanted to buy or accept as collateral.\textsuperscript{107} Charles Gasparino writes, “Even if 30 percent of all subprime mortgages were delinquent, that means 70 percent were still current, yet mortgage bonds were trading as if there were 100 percent delinquency.”\textsuperscript{108} In the weeks and months leading up to the Great Panic, MBS instruments, which had for years served as the dominant source of collateral for short term loans, were no longer accepted. Suddenly cut off, Wall Streets firms were struggling to come up with funding to keep their firms a going concern.\textsuperscript{109}

On Wall Street in the fall of 2008, the consequences of the downturn in U.S. real estate were two-fold: first, the value of MBSs serving as collateral were marked down—forcing investment banks and hedge funds to scramble to liquidate assets or obtain additional credit to cover their shortfalls. On September 18, 2008, “the losses announced by the big Wall Street firms on subprime mortgage bonds had started huge and kept growing. Merrill Lynch, which had begun by saying they had $7 billion in losses, now

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says Ms. Richey. Before defaulting on her mortgage, she owed about $230,000 more than the home was worth. People's increasing willingness to abandon their own piece of America illustrates a paradoxical change wrought by the housing bust: Even as it tarnishes the near-sacred image of home ownership, it might be clearing the way for an economic recovery.
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\textsuperscript{107} Cohan, \textit{Id} at 6 (quoting, “A vicious cycle of downward pressure on the value of mortgage securities, which had begun at least a year earlier, was reaching a crescendo and affecting the entire asset class, not just the junior and riskiest mortgages—so called subprime mortgages—but also the more secure, performing mortgages. The very word ‘mortgage’ was now a synonym for ‘toxic waste,’ or...‘Financial Ebola.’”); Andrew Ross Sorkin, \textit{Too Big To Fail}, Viking, 2009 at 88 (quoting, “It was a chilling time that traders were now treating mortgage-related assets as radioactive—unfit to buy at any price....To Bernanke what was happening was obvious: It was a panic. Banks and investors, fearful of being contaminated by these toxic assets, were hoarding cash and refusing to make loans of almost any kind.”)

\textsuperscript{108} The Sellout, Harper Business, 2009 at 470-471.

\textsuperscript{109} Robert J. Samuelson, “Bubbles, Bubbles, Toils and Troubles,” Claremont Review of Books, Spring 2010 at 42-43 (quoting, “By 2007, the ‘repo’ market may have grown to $10 trillion, and many banks and investment banks depended heavily on it for funds. But then it imploded, as lenders began to doubt the value of mortgage-backed securities being posted as collateral. Panic ensued because no one knew which financial institutions held the most ‘toxic’ securities, Gorton argues. So lenders withdrew credit from all.”)
admitted the number was over $50 billion. Citigroup appeared to have about $60 billion. Morgan Stanley had its own $9-plus billion hit….The big Wall Street firms, seemingly so shrewd and self-interested, had somehow become the dumb money.”

Secondly, the repurchase or “repo” market that enabled banks to post securities like MBSs in exchange for short-term funding began to freeze up. This vital source of short term funding, once touted by banks as “one of the safest parts of a bank’s liabilities,” was nonetheless “highly vulnerable in times of panic.” As Wall Street counterparties stopped accepting riskier securities as collateral in the repo market, access to this essential source of short-term credit was effectively shut off. Without the repo market, illiquidity or insolvency loomed over many Wall Street firms. In combination with greedy, inept

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110 Michael Lewis, *The Big Short* at 244.
113 William D. Cohan, *House of Cards*, Doubleday, 2009, at 343 (quoting one Bear Stearns executive, “The nature of the repo market is such that it’s ungoverned and unregulated that basically it’s like a demand loan where they can basically do whatever the freak they want…That is the beauty, or the weakness, depending on how you want to look at it, of the repo market. It’s all about confidence.”)
114 Cohan, Id. at 349 (quoting, “All the repo lenders—‘This is the entire Street, for all intents and purposes. Big and small, domestic and foreign, they’re all in this game.’”); William D. Cohan, “An Offer He Couldn’t Refuse,” The Atlantic, September 2009, 62 (quoting, “Without short-term financing, Merrill [Lynch, the largest retail brokerage house in the world] would not be able to meet its obligations as they became due and the firm would fail.”)

115 Frank Partnoy, *F.I.A.S.C.O: The Inside Story of a Wall Street Trader*, Penguin Books, 1997 at 46 (quoting, “In 1974 *Business Week* called Morgan Stanley ‘still the most prestigious of the investment banking houses.’ The firm had built a sturdy reputation as a straight shooter…However, while the firm sailed along cautiously, more aggressive banks—especially Salomon Brothers [the predecessor of Citibank] and Goldman, Sachs—began making more money. This was a serious problem for Morgan Stanley. In investment banking, cash conquers all. A bank’s goal was to make money, not to preserve its chastity. If Morgan Stanley could outearn rivals by capitalizing on its stellar reputation, fine. But if less-reputed banks were generating more cash, Morgan Stanley was doing something wrong.”); Daniel Gross, “The Gang of Five, and How They Nearly Ruined Us,” Slate.com, January 29, 2010, (quoting, “By the time Lehman ended its 14-year run as a public company with a "bagel" (a stock worth zero), some $45 billion in shareholder value had been destroyed. Shareholders didn't do much better with the other four. Bear Stearns was rescued from bageldom when JPMorgan bought it at a fire-sale price with the help of the Federal Reserve. Morgan Stanley and Goldman managed to remain independent and solvent, but only because huge subsidies were made available to them. In late January, Morgan Stanley's stock stood where it did in early 1998. Shareholders may have suffered, but employees and executives didn't. At investment-banking partnerships, compensation is contentious—epic brawls would take place each December as partners
and aloof executives at the helm. Wall Street’s dangerous dependence on using MBS
argued over bonuses. But they would take place in private, and the process essentially involved rich people
taking money out of one another’s pockets. Now it’s a zero-sum game, with executives and employees
essentially taking billions from shareholders.”); Zachary A. Goldfarb, “U.S. Says Goldman
fraud charges against Goldman Sachs…The suit, which alleges that Goldman Sachs misled its
clients…[also raises] the possibility that the bankers who devised these instruments knew they were selling
toxic financial products that could endanger the financial system but were concerned only with the fees
they would earn by doing so….‘The whole building is about to collapse anytime now,’ concluded Goldman
Sachs vice president Fabrice Tourre, who allegedly created the investment at the core of the case.”)

Andrew Ross Sorkin, Too Big to Fail at 121-122 (quoting, “The Lehman deal maker…at the very height
of the market, [Mark] Walsh concluded his last great deal…committing $17.1 billion in debt plus $4.6
billion in bridge equity to purchase of Archstone-Smith, a collection of premium apartment complexes and
other high-end real estate. The properties were excellent, but the price was sky-high, based on projections
that rents could be hiked substantially. Almost immediately, the proposition started to look dubious,
especially when the credit markets seized up.”); Charles Gasparino, The Sellout, Harper Business, 2009 at
318 (quoting, “In an interview with Fortune, [then-Chairman of Citigroup and former Treasury Secretary
under President Clinton] Robert Rubin admitted that, like [then-Citigroup CEO Chuck] Prince, he had no
understanding of a central tenet of Citigroup’s exposure to the CDO market; it was called a ‘liquidity put.’
In its competition with Merrill to win honors as the largest underwriter of CDOs, Citigroup had added an
incentive to entice investors to buy their CDO deals. Citigroup told investors they could sell, or ‘put,’ their
CDOs back to Citi at full price, 100 cents on the dollar, if the value of these bonds declined. When the
markets were running fine, putting back bonds was rare, almost nonexistent. But now that the CDO had
imploded, the puts came in droves, as much as $25 billion of them, adding to the firm’s massive exposure
to risky debt….[The existence of the liquidity put] underscored that the dysfunction in risk management
at Citigroup was every bit as severe as it was at Bear Stearns and Merrill.”)

Michael Lewis, The Big Short, at 174 (quoting, “On the surface, these big Wall Street firms appeared
robust; below the surface [hedge fund manager, Steve] Eisman was beginning to think, their problems
might not be confined to a potential loss of revenue. If they really didn’t believe the subprime mortgage
market was a problem for them, the subprime mortgage market might be the end of them….They didn’t
know for sure if these firms were in some way on the other side of the bets he’d been making against
subprime bonds, but the more he looked, the more sure that [Wall Street CEOs] didn’t know either.
[Eisman would] go to meeting with Wall Street CEOs and ask them the most basic questions about their
balance sheets. ‘They didn’t know,’ he said. ‘They didn’t know their own balance sheets.’ Once,
[Eisman] got…invited to a meeting with the CEO of Bank of America, Ken Lewis. ‘I was sitting there
listening to him. I had an epiphany. I said to myself, ‘Oh my God, he’s dumb!’ A lightbulb went off. The
guy running one of the biggest banks in the world is dumb!’”) and at 218-19 (quoting, “John Mack was
widely regarded among his CEO peers as relatively well informed about his bond firm’s trading risks.
After all, he was himself a former bond trader, and had been brought in to embolden Morgan Stanley’s
risk-taking culture. Yet not only had he failed to grasp what his traders were up to, back when they were
still up to it; he couldn’t even fully explain what they had done after they had lost $9 billion.”); Martin
Wolf, “Narrow Banking Alone Is Not the Answer,” Financial Times, December 15, 2009 at 6 (quoting,
“What entered the crisis was, we now know, an ill-managed, irresponsible, highly concentrated and
undercapitalized financial sector, riddled with conflicts of interest and benefiting from implicit state
6 (quoting, “Large financial conglomerates…exemplified management hubris and, in almost all cases, the
failure was the result of losses in activities that were peripheral to their core businesses…There is a sense in
which the bankruptcy of Lehman was a triumph of capitalism, not a failure. It was badly run, it employed
greedy and overpaid individuals, and the services it provided were of marginal social value at best. It took
risk that did not come off and went bust….The crisis was caused by greedy and inept bank executives who
failed to control activities they did not understand.”); Niall Ferguson, “A Lehman Deal Would Not Have
as collateral to access credit on the repo market for the funding of their day-to-day operations became exceedingly problematic.\textsuperscript{118} Illiquidity occurs “when a firm cannot

\textsuperscript{118} William D. Cohan, \textit{House of Cards}, at 205, (quoting, “Twenty-three years earlier, Bear Stearns knew this kind of financing was a risky proposition. Thus a prescient warning found its way into print: “While the Company takes steps to insure that these transactions are adequately capitalized, the large dollar amounts of these transactions could subject the Company to significant losses if parties entering into such agreements with the Company fail to meet their obligations and the Company incurs losses in liquidating its positions in the open market.”); \textit{Also See} William D. Cohan, “An Offer He Couldn’t Refuse,” The Atlantic, September 2009, at 62 (quoting, “Like Lehman and Bear Stearns…Merrill had a balance sheet chock-full of problem assets that it had been using as collateral in the overnight-financing markets. [Merrill Lynch CEO (and Stan O’Neal replacement, John] Thain knew the willingness of short-term lenders to keep funding Merrill would disappear rapidly if his firm lost the market’s confidence, as both Lehman and Bear Stearns had.”)
sell sufficient assets to meet its liabilities.”\footnote{Niall Ferguson, *The Ascent of Money*, Penguin Books, 2008 at 56.} Bear and Lehman may have possessed the right amount of assets, but these assets were not marketable due to the absence of potential buyers.\footnote{Id. at 56.} The sudden inability to use MBS as collateral on the repo market meant that many of the largest financial institutions were quickly becoming insolvent.

iii. \textit{Cheap Credit Fuels Leverage and Magnifies Losses}

Leverage—that is “borrowing money to increase the wallop of your bet”\footnote{Sorkin, *Too Big To Fail*, Viking, 2009 at 14.}— became \textit{de rigueur} on Wall Street in the decade leading up to the Great Panic. In a bull market, leverage can make speculative investments extraordinarily profitable. But in more unsettled economic times, leverage magnifies losses and threatens the stability of the entire financial system.\footnote{William D. Cohan, *House of Cards* at 382 (noting that in August of 2007, “Bear’s increasingly bloated and illiquid balance sheet--$525 billion of assets on a $12 billion sliver of equity” meant that it had leverage ratio of nearly forty-four times. In other words for every dollar in equity, Bear had almost forty four dollars worth of debt. Leverage ratios at Lehman Brothers were similarly high as “most people considered [it to be] just a bigger version of Bear Stearns.”)} Prior to the Great Panic, Dick Fuld, who served as the chief executive officer of Lehman Brothers until its demise, analogized the dangers of leverage, “‘It’s paving the road with cheap tar….When the weather changes, the potholes that were there will be deeper and uglier.’”\footnote{Sorkin, *Id.* at 14.} Paul Jacobson, a former partner at Goldman Sachs, argues, “The root of all this evil [referring to the Great Panic] is baked in leverage. If an entity can’t lever its balance sheet too much, then it can’t do a lot of this stuff…Bank lending has been focused away from Main Street toward hedge funds and Wall Street, and that can be bad if the leverage is used on too many complex derivatives.”\footnote{Gordon S. Murray, “Presentation to Congress,” March 11, 2010 at 10.} Without regulations restraining leverage, Andrew Ross Sorkin notes,
“the rewards of placing aggressively optimistic bets on the future [are] just too great.”

Through clever financial engineering, credit derivatives enabled banks to take on more leverage without violating their regulatory requirements. If the likelihood of defaults increased, only then would banks have to provide more collateral.

Over the past decade on Wall Street, the dramatic increase in leverage was the confluence of several factors. Responding to the bursting of the tech bubble and large corporate accounting scandals like Enron and Worldcom, the Chairman of the Federal Reserve, Alan Greenspan, cut interest rates early in the last decade and kept them at historically low levels. Low interest rates encouraged Wall Street firms to increase leverage (increase debt relative to equity) in order to maximize profits. Secondly, the codependent relationship between China and the United States helped to keep interest rates low. The Chinese stockpiled trillions of dollars in order to keep its currency cheap. Buoyed by rising real estate prices, home equity loans and easy access to credit, the U.S. consumer returned the favor by buying cheap Chinese exports. The Chinese middle class, poor by American standards, were nevertheless savers. The Chinese government’s partial embrace of market-oriented economic policies combined with the dramatic increase in productivity of its billion-plus workforce produced a “tsunami of capital onto world markets…[pushing] interest rates down globally.” Some of that capital would feed mortgage-backed securitization markets. For a time, however, “global real interest

125 Sorkin, Too Big To Fail, Viking, 2009 at 14.
126 Sorkin, Id. at 160.
127 James Keller, “Is Deregulation to Blame?” Claremont Review of Books, Fall 2009 at 18 (quoting, “Back in 2006 there was a general recognition that credit was too easy to obtain, whether for housing, commercial real estate, consumer finance, or corporations, and trouble of some sort would surely strike.”)
rates—the cost of borrowing after inflation” dropped precipitously, housing prices crept higher and higher, and Wall Street banks earned billions. It was a domestic disaster waiting to happen whose impact would have global implications.

Lastly in the final decade of the Super Bull Market, the absence of regulation allowed Wall Street firms to increase leverage as a means of boosting earnings and bonuses. “Intense lobbying” by Wall Street firms produced “regulatory forbearance” resulting in widespread financial deregulation. Consequently, Wall Street firms exposed themselves to substantial risk unbeknownst to regulators. Regulators, having ceded responsibility for controlling systemic risk to market participants, failed to grasp the degree to which precipitous declines in real estate values would destabilize the financial sector. The Net Capital Rule, instituted in 2004 after direct lobbying efforts by Wall Street CEOs, including future Treasury Secretary Henry Paulson, was one particular egregious example of deregulation. Worn down by intense pressure, the SEC exempted the brokerage divisions of investment banks from a regulation capping leverage ratios. As billions of dollars were no longer required to be held in reserve to

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131 Oliver Hart and Luigi Zingales, “Curbing Risk on Wall Street,” National Affairs, Volume 3, Spring 2010 at 28; Frank Partnoy, *F.I.A.S.C.O: The Inside Story Of A Wall Street Trader*, Penguin Books, 1997 at 98 (quoting, “The next day, April 13 [1994], the House Banking Committee called Budapest-born George Soros…to testify about the dangers of derivatives…He warned that ‘some other instruments offer exceptional returns because they carry the seeds of a total wipeout.’ He also warned of a meltdown in which regulatory authorities would have to intervene to protect the integrity of the financial system….However, not even Soros could persuade Congress to pass any laws and ultimately these proposals failed. Soros [and other proponents of regulating derivatives] were up against still competition. In the past two election cycles alone, legislators received an estimated $100 million in contributions from banks, investment firms, and insurance companies.”)
132 Id. at 336-7.
133 Daniel Gross, “The Gang of Five, and How They Nearly Ruined Us,” Slate.com, January 29, 2010 at http://www.slate.com/id/2242964/, (quoting, “Perhaps the most disastrous decision of the past decade was the Securities and Exchange Commission’s 2004 rule change allowing investment banks to increase the amount of debt they could take on their books—a move made at the request of the Gang of Five’s CEOs [referring to the heads of Merrill Lynch, Goldman Sachs, Bear Stearns, Lehman Brothers and Morgan Stanley].”)
134 Gross, *Id.*
offset potential losses, investment banks began to exponentially increase leverage. Rather than bolster capital cushions, reserves from brokerage divisions could instead be used to “invest in the fast-growing but opaque world of mortgage-backed securities, credit derivatives…and other exotic instruments.” All of which meant a downturn in bond markets would be devastating.

Paul McCulley, an executive at PIMCO wryly notes, “There is nothing like a bull market to make geniuses out of levered dunces. Call it the Mae West Doctrine, where if a little fun is good and more is better, then way too much is just about right.” Oliver Hart and Luigi Zingales, professors at Harvard and University of Chicago respectively, write, “The easiest way to make money on Wall Street was (and remains) heavy borrowing and extreme risk-taking.”

In credit derivative markets, no financial institution personified this ethos better than AIG. The world’s largest insurer prior to the Great Panic had made a fortune selling credit default protection in the final decade of the Super Bull Market only to find itself on the verge of insolvency. AIG’s “fatal mistake” was selling $60 billion worth of CDS protection on collateralized debt obligations of the most dubious quality—instruments almost entirely collateralized by the riskiest tranches of subprime mortgage loans. By September of 2008, the fun was over—fantastic profits earlier in the decade now corresponded to devastating losses. Under the terms of its credit derivative instruments, AIG was required to post only a small fraction of the collateral required in the event of a

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138 Robert Pozen, Too Big to Save?, John Wiley & Sons, Inc., 2010 at 77.
default. As the risk of insolvency increased, AIG was forced to post more “collateral with its swaps buyers or counterparties [as a means of guaranteeing] eventual payment,” these unexpected and nearly simultaneous margin calls on its sell-side CDS positions would create a near fatal liquidity problem for the world’s largest insurance company. Blankfein noted, AIG’s “failure of risk management [was] of colossal proportion.”

Having lost investor confidence, AIG’s stock price declined 61% in under a week, and AIG’s “cash [reserves were] vanishing at an alarming rate.” To avoid “‘a disorderly failure of AIG [which] would have severely threatened global financial stability’” and created a global bank run of “‘potentially catastrophic unforeseen consequences,’” $183 billion of taxpayer dollars would be required to save AIG from impending insolvency.

B. Over-The-Counter Derivatives: Haute Finance or Financial Time Bomb?

Generally speaking, derivatives are “contracts based on the changeable value of underlying securities, or other variables, referred to as the reference asset, that can range

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140 Mary Williams Walsh and Michael J. de la Merced, “As A.I.G.’s Losses Grow, Its Survival Options Shrink,” NY Times, February 24, 2009, http://www.nytimes.com/2009/02/25/business/25insure.html; Wessel, In Fed We Trust, Crown Business, at 191 and 197 (writing, “AIG’s difficulties grew more intense by the hour. With its debt downgraded and its stock price plummeting, the insurance giant’s trading partners were refusing to do business with it. Over the weekend, AIG executives had told the Fed and the Treasury it had enough money to make it until Thursday. By Tuesday morning, AIG said they could make it till the next day. By Tuesday afternoon, they were saying they might need $4 billion by the end of the day—and even that proved optimistic…AIG had said that afternoon that it anticipated $4 billion; Fed officials were stunned when AIG drew $14 billion that night and another $23 billion over the next few days.”
145 Wessel, Id. at 194.
from interest rates and currencies to energy prices and the weather.”\textsuperscript{146} Less than two
decades ago, credit default swaps were devised as means of insuring against the risk that
bond-issuers like Lehman Brothers, who packaged and sold debt instruments like
mortgage-backed securities, might fail and neglect to pay their creditors in full.\textsuperscript{147} The
price of a CDS “reflects the market’s assessment of how likely it is that the firm’s debt
will not be repaid in full.”\textsuperscript{148} While CDS were created to reduce default risk, the CDS
market like other OTC derivatives markets began to resemble a “huge casino” in which
“trillions of dollars [were] being bet by the big banks on a daily basis.”\textsuperscript{149} As financial
institutions began to flounder in 2008, CDS prices on their debt began to skyrocket. As
systemic risk began rising dramatically throughout 2008, the CDS market served as both
the barometer of financial distress and a source of it as well.\textsuperscript{150}

Credit default swaps are traded over the counter. The term “over-the-counter” refers
to the fact that credit derivatives are not traded on exchanges or cleared through clearing
houses unlike other commodity-based derivatives. Credit default swaps are highly
customizable hybrid financial instrument that borrow characteristics from securities like
stocks and bonds as well as the characteristics of insurance policies. In its most basic
form, a CDS is a bilateral contract that obligates Party #1 to pay Party #2 in the event that

\textsuperscript{146} Daniel Altman, “Derivatives: Corporate Financial Leverage Wrapped in Enigma,” June 11, 2003,
enigma.html.

\textsuperscript{147} Oliver Hart and Luigi Zingales, “Curbing Risk on Wall Street,” National Affairs, Volume 3, Spring
2010 at 27.

\textsuperscript{148} Oliver Hart and Luigi Zingales, Id. at 27.

\textsuperscript{149} Charles Gasparino, The Sellout, Harper Business, 2009 at 32.

\textsuperscript{150} Senator Chris Dodd, Chairman of the Committee on Banking, Housing, and Urban Affairs, “Summary:
Restoring American Financial Stability – Discussion Draft,”
[on credit derivatives] linked thousands of traders, creating a web in which one default threatened to
produce a chain of corporate and economic failures worldwide.”)
Party #3 defaults. Much like an insurance policy, Party #2 pays premiums to Party #1 for this securitized form of default protection on Party #3. Chairman of MFS Investment, Robert Pozen, writes, “The availability of CDS encouraged many investors in MBS to take on more risk by their very existence. Just as flood insurance encourages people to build houses on flood plains, so bond default protection increased the willingness of investors to buy complex mortgage-backed securities even if they did not fully understand the risks involved.”

Credit default swaps are unlike insurance products in the following ways:

Specifically, CDS are different from normal insurance contracts in three key respects. First, unlike the borrower of car insurance who must own a car, a CDS buyer does not have to own the underlying bond. In insurance parlance, the buyer does not need to have an insurable interest. As a result, CDS were often purchased by hedge funds and others investors making speculative bets that the bond’s default risk would actually materialize. Second, since neither buyers nor sellers had to own the debt securities that were the subject of the CDS, the notional value of the CDS on any security could be a very large number. In fact, the CDS on a bond issued by a particular company were sometimes higher than the actual value of all outstanding bonds of that type from the company.

During the Great Panic as the creditworthiness of Party #3 deteriorated, sellers of default protection like AIG found itself incapable of satisfying margin calls—the insurance giant had no more cash or liquid assets to post as collateral.

In the 1990s, J.P. Morgan developed the credit default swap instrument to protect against the risk that corporate debtors would default on their bonds. At their inception, credit default swaps were heralded as one of the most significant advances in financial

154 Carrick Mollenkamp, Serena Ng, Liam Pleven and Randall Smith, *Id.* (quoting, “AIG became one of the largest sellers of credit-default-swap protection, according to a Moody's Investors Service report last week. For years, the business was extremely lucrative. In a 2006 SEC filing, AIG said none of the swap deals now causing it pain had ever experienced high enough defaults to consider the likelihood of making a payout more than remote, even in severe recessionary market scenarios.”)
engineering—a completely customizable insurance-like product that could be traded like a stock or bond. Due to their presumed ability to dilute or remove outright the risk of bond defaults, the types of debt that credit derivatives insured broadened considerably over the following decade. By hedging this risk, financial institutions were less conflicted about underwriting corporate debt in the 1990s. In the 21st century, credit-default swaps were being used to hedge the risk of subprime mortgage lending.

By reducing the risk of default, the cost of borrowing (i.e. interest rates) fell, encouraging the accumulation of debt in the U.S. and elsewhere. To back up this proliferation of debt, the credit default swap market began to grow exponentially. In

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155 Chairman Ben S. Bernanke, Speech to the Federal Reserve Bank of Atlanta’s 2007 Financial Markets Conference, Sea Island, Georgia: “Regulation and Financial Innovation”, May 15, 2007, http://www.federalreserve.gov/newsevents/speech/bernanke20070515a.htm, (quoting, “In addressing the challenges and the risks that financial innovation may create, we should also always keep in view the enormous economic benefits that flow from a healthy and innovative financial sector. The increasing sophistication and depth of financial markets promote economic growth by allocating capital where it can be most productive. And the dispersion of risk more broadly across the financial system has, thus far, increased the resilience of the system and the economy to shocks. When proposing or implementing regulation, we must seek to preserve the benefits of financial innovation even as we address the risks that may accompany that innovation.”)

156 Andrew Ross Sorkin, Too Big To Fail, Viking, 2009 at 5.

157 Michael Lewis, “Betting on the Blind Side,” Vanity Fair, April 2010 at 137 (quoting, “In the beginning, credit-default swaps had been a tool for hedging: some bank had loaned more than they wanted to General Electric because G.E. had asked for it, and they feared alienating a long-standing client.”)

158 Lewis, Id. at 137 (quoting, “Inside of three years, credit-default swaps on mortgage-mortgage bonds would become a trillion-dollar market and [precipitated] hundreds of billions of losses inside big Wall Street firms.”)

159 Stephen Fidler, Gregory Zuckerman and Brian Baskin, “Swaps Come Under Fire,” Wall Street Journal, March 10, 2010 at A8; Cohan, Id. at 277, (quoting, “Fed Chairman Alan Greenspan’s aggressive campaign, starting in January 2001, to lower interest rates (rates dropped thirteen times between May 2000 and June 2003, going from 6.5% to 1.00%, with eleven of those rate decreases coming in 2001 alone. ‘The Fed’s easy-money policy put a lot of wind at the back of some of the transactions in the housing market and elsewhere we are now suffering from.’”); Also See John Cranford, “Hatin’ on the Fed,” CQ Weekly, Nov. 23, 2009 at 2734 (Critics of the Federal Reserve maintain that “the Fed caused the crisis that brought the economy to a crashing halt a year ago, and then it bailed out the financiers who profited from the housing bubble at our expense.”)

160 Niall Ferguson, The Ascent of Money, at 5-6 (quoting, “The volume of derivatives—contracts derived from existing securities or transactions, such as interest rate swaps or credit default swaps—has grown even faster, so that by the end of 2006 the notional value of all ‘over-the-counter’…was just over $400 trillion. Before the 1980s, such things were virtually unknown.”); Ferguson, Id. at 229 (quoting, “According to the Bank for International Settlements, the total notional amounts outstanding of OTC derivative contracts—arranged on an ad hoc basis between two parties—reached a staggering $596 trillion in December 2007,
the decade leading up to the Great Panic, the CDS market, barely known off Wall Street, would overtake the New York Stock Exchange in total value.\textsuperscript{161} Notably, the CDS market was dominated by a small number of large financial institutions.\textsuperscript{162} In the bull market that followed the 9/11 terrorist attacks, sellers of credit default protection profited handsomely when defaults were rare.\textsuperscript{163}

C. Collateralized Debt Obligations + Credit Defaults Swaps = End of Securitization

i. The Magnetar Trade: The Destabilizing Confluence of Collateralized Debt Obligations and Credit Default Swaps

This essay documents numerous examples of financial and economic catastrophe, so it is easy to ignore those that took a winning bet on mortgage-backed securities and credit default swaps. The Magnetar trade represents the moment in which brilliant bond traders and hedge fund managers learned how to game the system. The CDS market is a zero-sum game in which for every loser there is a winner.\textsuperscript{164} Profit aside, what makes the Magnetar Trade notable was for the way in which a relatively small Chicago-based hedge fund was able to greatly increase its odds of successfully shorting collateralized debt with a gross market value of just over $14.5 trillion….That is to say, the notional amount outstanding if all derivatives paid out is roughly forty-one times the contracts’ estimated market value.”)


\textsuperscript{162} Darrell Duffie, “How Should We Regulate Derivatives’ Markets?” Defining Ideas, Hoover Institution, 2010 Number 1 at 19. (quoting, “When unconstrained by effective risk management or regulation, derivatives enable high concentrations of risk in individual financial institutions.”)

\textsuperscript{163} Carrick Mollenkamp, Serena Ng, Liam Pleven and Randall Smith, “Behind AIG's Fall, Risk Models Failed to Pass Real-World Test,” WSJ, October 31, 2008, http://online.wsj.com/article/SB122538449722784635.html; AIG’s Financial Products division, referred to as AIGFP or FP, generated billions in profits taking on credit risks that other banks and hedge funds sought to hedge (quoting, “AIG became one of the largest sellers of credit-default-swap protection, according to a Moody’s Investors Service report last week. For years, the business was extremely lucrative. In a 2006 SEC filing, AIG said none of the swap deals now causing it pain had ever experienced high enough defaults to consider the likelihood of making a payout more than remote, even in severe recessionary market scenarios.”)

\textsuperscript{164} Vipal Monga, “The Abyss,” The Deal.com, September 19, 2008 at http://www.thedeal.com/newsweekly/features/the-abyss.php (quoting, “As Moody's describes it, the CDS market is a closed system in which losses by one party are balanced by gains from another, in what, in theory, is as close to a zero-sum game as is possible in the markets.”)
obligations (CDO), a highly complex MBS instrument arguably designed\textsuperscript{165} to reduce default, through the purchase of credit default swaps. The mortgage-backed securities underlying Magnetar’s positions, however, were those most likely to default. In the meantime, the returns on these high risk CDOs would fund the premiums on the CDSs backing it up.\textsuperscript{166} Despite allegations of unethical and immoral (if not illegal) behavior, the financial engineering underlying the Magnetar Trade is arguably brilliant. In essence, the fund would buy the least-senior, most risky, bottom-level tranches of the CDO—known as the equity tranche—and short the whole CDO by buying credit default swaps. In 2005, the investment banks were touting CDOs as an almost riskless investment in the “hottest” market around—the U.S. housing market.\textsuperscript{167} It is alleged that Magnetar set about to greatly enhance the riskiness of the CDOs to increase the likelihood that these CDOs would collapse resulting in a huge payoff on its CDS positions. CDO managers, who have a fiduciary duty to ensure that CDOs are fairly represented to all investors,\textsuperscript{168}

\textsuperscript{165} William D. Cohan, \textit{House of Cards} at 235, (noting that Jimmy Cayne, former Bear Stearns CEO from 1993-2008, “had no more than an intuitive feel for the markets or for their growing complexity. For sure, he could decide when to buy or sell a stock, but when it came to understanding the calculus of and risks inherent in, say, a CDO-squared (that is, a collateralized debt obligation backed not by a pool of bonds and loans but by CDO tranches), well, that was a bridge too far. (In this, he was most certainly not alone among top Wall Street executives.)”

\textsuperscript{166} Robert Pozen, \textit{Too Big to Save?}, John Wiley & Sons, Inc., 2010 at 73 (quoting, “Credit default swaps were used often to protect against defaults on more complex forms on mortgage-backed securities, which involved more risks than most of the writers of CDS understood. One such complex form was the collateralized debt obligation.”)


\textsuperscript{168} US Legal at http://definitions.uslegal.com/b/breach-of-fiduciary-duty (quoting, “A fiduciary duty is an obligation to act in the best interest of another party. For instance, a corporation’s board member has a fiduciary duty to the shareholders, a trustee has a fiduciary duty to the trust’s beneficiaries, and an attorney has a fiduciary duty to a client. A fiduciary obligation exists whenever the relationship with the client involves a special trust, confidence, and reliance on the fiduciary to exercise his discretion or expertise in acting for the client. The fiduciary must knowingly accept that trust and confidence to exercise his expertise and discretion to act on the client’s behalf. When one person does agree to act for another in a fiduciary relationship, the law forbids the fiduciary from acting in any manner adverse or contrary to the interests of the client, or from acting for his own benefit in relation to the subject matter. The client is entitled to the best efforts of the fiduciary on his behalf and the fiduciary must exercise all
were either pressured or financially incentivized to lower the quality of the mortgage bonds being selected for CDOs. Although CDO managers were intended to act as an independent intermediary, their loyalty appears at least in hindsight to be more aligned with the Wall Street firms creating the CDOs.\textsuperscript{169} If the CDO were to fail, Magnetar’s profits from its CDS positions would far exceed the losses incurred investing in the equity tranches, whose values represented a relatively small percentage of the total value of the CDO.\textsuperscript{170} To cover the cost of this hedge, Magnetar used the high interest payments from its equity tranche position to fund the purchase of CDS. In effect, Magnetar could remain protected by its CDS position for as long as the CDO continued to perform.

Seizing upon this opportunity to game the system, it is alleged that Magnetar repeated this trading strategy until the CDOs it sponsored blew up. Today, 96% of the CDOs Magnetar invested in are now worthless.\textsuperscript{171}

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169 Michael Lewis, \textit{The Big Short} at 141 (quoting, “The CDO manager’s job was to select the Wall Street firm to supply him with subprime bonds that served as the collateral for CDO investors, and then to vet the bonds themselves...That, however, was mere theory...The CDO manager, in practice didn’t do much of anything, which is why all sorts of unlikely people suddenly hoped to become one...The less mentally alert...and the fewer the questions they asked about the triple-B-rated subprime bonds they were absorbing into their CDOs, the more likely they were to be patronized by the big Wall Street firms. The whole point of the CDO was to launder a lot of subprime mortgage market risk that the firms had been unable to place straightforwardly. The last thing you wanted was a CDO manager who asked a lot of tough questions. The bond market had created what amounted to a double agent—a character who seemed to represent the interests of investors when he better represented the interest of Wall Street bond trading desks.”)
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170 Jesse Eisinger and Jake Bernstein, “The Magnetar Trade: How One Hedge Fund Helped Keep the Bubble Going,” Propublica.org, April 9, 2010 at http://www.propublica.org/feature/all-the-magnetar-trade-how-one-hedge-fund-helped-keep-the-housing-bubble, (quoting, “If [the equity] costs, say, $50 million, an entire CDO could be 20 times that, $1 billion. And if the CDO begins to go south and you’re smart enough to have taken out enough insurance, you can make hundreds of millions of dollars. That, of course, would take a bit of the sting out of losing your $50 million investment in the equity.”)
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171 Jesse Eisinger and Jake Bernstein, \textit{Id.}
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Losses stemming from toxic CDOs would incapacitate a large number of financial institutions. The Magnetar Trade illustrates the danger in having lightly regulated and highly leveraged hedge funds and investment banks participating in unregulated financial markets. The Magnetar Trade and trades like it arguably made the financial crisis more extreme and the unwinding more severe.

ii. Synthetic Collateralized Debt Obligations

In terms of systemic risk, if the ordinary CDO is a hand grenade, the synthetic CDO is a Tomahawk missile. At the height of the real estate bubble in 2006, those originating the loans began to run out of warm bodies to take out mortgages or refinance. Synthetic CDOs were designed to mimic the risk and return characteristics of CDOs. These instruments would in effect keep thousands of highly overpaid financial

172 Robin Sidel, “Toxic CDOs Beset FDIC as Banks Fail,” Wall Street Journal, May 18, 2010 at http://online.wsj.com/article/SB10001424052748704314904575250811941096220.html?mod=WSJ_hpp_MIDDLEThirdNews (quoting, “The FDIC has inherited hundreds of potentially worthless bonds that have come back to haunt the Wall Street firms that sold them, the credit-rating firms that graded them and the hundreds of small banks that bought them. The Federal Deposit Insurance Corp., and by extension the U.S. taxpayer, owns more than 250 collateralized debt obligations that were purchased by small institutions that later failed. Although the bonds have a book value of more than $400 million, they are a headache for the agency as it grapples with the toxic assets flowing from many banks around the country…. The problem is that it is difficult to pin down the value of something for which there may be no market. According to FDIC estimates, that the book value of the CDOs that the agency now holds is more than $400 million. But "a lot of these things will have little or no market value," Mr. Browne said.)

Jesse Eisinger and Jake Bernstein, “The Magnetar Trade: How One Hedge Fund Helped Keep the Bubble Going,” Propublica.org, April 9, 2010 at http://www.propublica.org/feature/all-the-magnetar-trade-how-one-hedge-fund-helped-keep-the-housing-bubble. (quoting, “‘Magnetar went into the business of creating subprime CDOs on an unheard of scale’….Magnetar’s deals amounted to somewhere between a third and half the total volume in the particularly risky corner of the subprime market.”)


174 Michael Lewis, The Big Short at 143 (quoting, “Now he got it: The credit default swaps, filtered through the CDOs, were being used to replicate bonds backed by actual home loans. There weren’t enough Americans with shitty credit taking out loans to satisfy investors’ appetite for the end product. Wall Street needed his bets in order to synthesize more of them.”)
intermediaries working in the subprime mortgage industry in business. Robert Pozen writes:

The popularity of CDS created another opportunity for new products called synthetic CDOs....They didn’t need actual homes, borrowers, or lenders to create new financial products to sell. For this purpose, premiums from a CDS buyer were the functional equivalent of mortgage payments from a borrower. The investment banker could create pools of CDS and issue tranches of debt securities, based on the premium payments from the buyers of CDS in these pools.176

Given the upfront originating fees collected by the investment banks selling synthetic CDOs, Wall Street began to pump out synthetic CDOs en masse. The eventual decline in real estate and subsequent increase in defaults caused financial institutions to incur destabilizing losses “one hundred times greater” than the value of subprime loans.177 Robert Pozen writes:

When the pools with subprime mortgages began to default at unexpectedly high rates in 2007, the value of the CDS to the buyers increased as the value to the insurance companies decreased. Because of the these high default rates, the buyers often exercised their right to demand that the insurance company transfer to them large amounts of cash to ensure payment on the CDS.178

Notably, the existence of synthetic CDOs sheds light on why so many financial institutions were willing to sell credit default swaps in the face of an increasingly rocky economic climate, declining real estate values and rising foreclosure rates. It was not simply the case of failing to manage risk effectively. The Wall Street firms originating synthetic CDOs needed CDS buyers—those willing to bet on the CDO defaulting—in order to make the synthetic CDOs. Creating unsavory borrowers out of whole cloth required the investment of those betting that the CDO in question would fail.179

175 Michael Lewis, The Big Short, at 142 (who provides the example of Wing Chau, a former portfolio manager working at the New York Life Insurance Company earning a relatively-modest salary (by Tri-State area standards anyways) of $140,000, who earned $26 million in his first year as a CDO manager.)
176 Robert Pozen, Too Big to Save?, John Wiley & Sons, Inc., 2010 at 75.
177 Michael Lewis, The Big Short, at 143.
178 Pozen, Id. at 72.
179 Michael Lewis, Id. at 143.
II. The Purpose of Regulatory Reform and The Failure of Self-Regulation

A. The Purpose of Financial Regulation: Controlling Systemic Risk

In the realm of financial markets, only two types of risk exist: systemic and unsystemic risk. Modern financial theory teaches that unsystemic risk—the risk that a particular company will become insolvent or that a particular market will fail\(^ {180}\)—can be diversified away by investing in a wide array of stocks, bonds, real estate and other investment vehicles. Systemic risk, however, describes the likelihood of “a sudden, often unexpected, event or series of events that disrupts financial market… [and disrupts] the efficient channeling of resources, to such a great degree that it causes a significant loss to, or collapse of, the real economy.”\(^ {181}\) During the Great Panic, systemic risk rose to levels not seen since the Great Depression, and panicky investors, individual and institutional, began leaving securities markets in droves seeking the safety of cash, gold and treasury bills\(^ {182}\)—the latter of which by December of 2008 were yielding negative returns.\(^ {183}\) This essay argues that OTC derivatives markets should be regulated to minimize systemic risk.


\(^{182}\) Paul Sullivan, “Running Scared,” NYT, Oct 29, 2009, F1 (quoting, “Investors are so wary of another bust that they are taking extraordinary steps to try to prevent getting caught in one. A cash bubble, and the emerging gold bubble…are really fear bubbles.”); Robert M. Solow, “Hedging America,” The New Republic, December 30, 2009 at 39, (quoting, “Financial markets are especially vulnerable to this kind of herd behavior, especially in the presence of asymmetries in information. The panic seller (or frantic buyer) next door may know something I don’t know. Technically, this sort of herd behavior leads to the instability of a market system. The market reacts destructively to small disturbances.”)

\(^{183}\) David Gaffen, “Three-Month Bill Yield Goes Negative,” Wall Street Journal, December 9, 2008 at http://blogs.wsj.com/marketbeat/2008/12/09/three-month-bill-yield-goes-negative/ (At some point during the afternoon, the yield on the three-month Treasury bill dipped below 0%, according to traders, as investor desire to hold short-term liquid debt trumps all else….“It’s the modern version of stuffing it into your mattress,” says Thomas di Galoma, head of trading at Jefferies & Co…. A negative bill yield means investors are willing to pay to get the securities and forego the interest they’d normally receive. It comes one day after a three-month bill auction that yielded 0.005%, the lowest auctioned yield since 1941, and at a time when investors, in part because of year-end worries, are “trying to hide their money for year-end in the safest instrument known to mankind, and that’s Treasury bills,” Mr. di Galoma says).
remove the necessity of government bailouts and avoid financial crises of this magnitude.

Although originally developed to reduce the risk of credit default, credit derivatives became a source of systemic risk in three different ways. First, OTC derivatives were used to “speculate on the future prospects of [debt issuers]” in the years leading up to the Great Panic. Speculation describes an investment strategy that seeks to maximize profits (and employee bonuses) by increasing risk exposure. Rick Bookstaber, a former hedge fund risk manager, testifying before the Senate, stated, “Viewed in an uncharitable light, derivatives and swaps can be thought of as vehicles for gambling. They are, after all, side bets on the market.” Just like doubling down on a bad bet, “derivatives can have a compounding effect when things go wrong.” Secondly, credit default swaps helped banks to increase leverage. Rick Bookstaber notes,

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184 Senator Chris Dodd, Chairman of the Committee on Banking, Housing, and Urban Affairs, “Summary: Restoring American Financial Stability – Discussion Draft,” http://banking.senate.gov/public/_files/FinancialReformDiscussionDraft111009.pdf, (quoting, “Over-the-counter derivatives are supposed to be contracts that protect businesses from risks, but they became a way for companies to make enormous bets with no regulatory oversight or rules and therefore exacerbated risks.”); Editorial, “A.I.G., Greece, and Who’s Next?” New York Times, March 4, 2010 at http://www.nytimes.com/2010/03/05/opinion/05fri1.html?hp (quoting, Derivatives are supposed to reduce and spread risk. In a credit default swap, for instance, a bond investor pays a fee to a counterparty, usually a bank, that agrees to pay the investor if the bond defaults. But because the markets in which they trade are largely unregulated, derivatives can too easily become tools for dangerous risk-taking, vast speculation and dodgy accounting.”); Nicole Bullock, “California Seeks Details of Banks’ CDS Trade,” Financial Times, March 31, 2010 at 3.

185 William D. Cohan, House of Cards at 276, (quoting, “[Former Bear Stearns CEO and Chairman, Jimmy] Cayne even defended the entire Wall Street compensation scheme, which had transformed from one of shared liabilities back when the firms were private partnerships to one of encouraging bankers and traders to take short-term risks with other people’s money in the hope of making a huge, no-strings attached bonuses,” ratcheting up systemic risk in the process.); Also See, Lucian Bebchuk, Alma Cohen and Holger Spamann, “Bankers Had Cashed In Before the Music Stopped,” Financial Times, December 7, 2009 at 11 (quoting, “Executives regularly took large amounts of money off the table by unloading shares and options. Overall, in 2000-08 the top-five teams at Bear and Lehman cashed out close to $2bn in this way…But repeatedly cashing in large amounts of performance-based compensation based on short-term results did provide perverse incentives…To be sure, executives’ risk-taking might have been driven by a failure to recognize risks or by excessive optimism…But given the structure of executive pay, the possibility that risk-taking was influenced by these incentives should be taken seriously.”)


188 Greenblatt, Id. at 445.
“Derivatives provide a means for obtaining a leveraged position without explicit financing or capital outlay and for taking risk off-balance-sheet, where it is not as readily observed and monitored.”189 Those seeking to hedge their credit default exposure flocked to AIG, whose triple-A credit rating, backed up by over a trillion dollars worth of assets, could be used to boost the credit ratings of riskier, lower quality assets like MBSs.190 At AIG, CDSs were sold as “regulatory capital relief”—instruments created to distort capital requirements, enabling financial institutions to take on more leverage.191 Lastly, many of the derivatives bought and sold by investment banks’ Lehman Brothers and Bear Stearns “served a particular business purpose” (i.e. not standardized). When these investment banks unraveled suddenly, their counterparties needed to quickly replace these positions causing a “surge of demands for new derivatives’ positions with other dealers” that put “severe pressure on a range of financial markets, sometimes distorting normal price relationships and adding to the general disruption.”192

B. Abridged History of 20th Century Financial Regulation

In response to the stock market crash of 1929, Congress passed the Glass Steagall Act (GSA) to erect a barrier between commercial and investment banking to protect depositors—those who had behaved responsibly in socking away their hard earned wages at banks.193 Deposits were and remain today the primary source for making loans; they

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189 Greenblatt, Id. at 445.
190 Andrew Ross Sorkin, “Too Big to Fail,” Id. 394-5.
191 Sorkin, Id.
193 David L. Scott, “Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor,” Houghton Mifflin Company, 2003 (quoting “The [Glass Steagall Act] was passed to keep banks from entering into nonfinancial businesses (for example, owning corporate stock) and more risky activities.”); Farlex Financial Dictionary, 2009 (quoting, “Legislation in the United States, enacted in 1933, intended to restore confidence in the banking system...The act also prohibited bank holding companies from owning
are the lifeblood of commercial banking. The GSA gave Wall Street firms a choice: remain commercial banks (i.e., accept deposits and lend at an interest rate greater than the interest rate paid on deposits), or, instead, become investment banks (i.e., underwrite and advise initial public offerings and distribute secondary offerings.)

For fifty years after the Great Depression, many argue that the GSA successfully controlled systemic risk by strictly curtailing the risk-taking of commercial banks in order to protect depositors. Investment banks, who risked only the capital of their partners or shareholders and their creditors, would be permitted to undertake higher-risk financial activities, such as securities underwriting and financial product innovation undertaken by investment banks. This separation between commercial and investment banking controlled systemic risk and protected depositors.

C. The Era of Deregulation and the Failure of the Self-Regulatory Model

i. Government Recedes from Financial Markets

As interest rates fell from double-digits in the early 1980s and the Super Bull Market began, the Reagan Administration and the administrations that followed were less active in managing the economy—instead, market forces were relied upon to ease the pain of brokerages or certain securities. This provision was designed to prevent banks from engaging in most investment activities and thereby to reduce the risk they carried.”

Section 20 of the Glass-Steagall Act prohibited commercial banks from being affiliated with investment banks. Subsequently, JP Morgan, the 20th century banking giant, was forced to split in two: JP Morgan, now only a commercial bank, and Morgan Stanley, the newly independent investment bank. Section 32 prohibited directors, principals, officers and employees from serving on the boards of commercial banks.

Nicole Gelinas, “Too Big Not To Fail,” National Affairs, Number 2, Winter 2010 at 25 (quoting, “It took years for the White House to convince the business and financial sectors that the new regulations were permanent and wouldn’t be quietly lifted once the crisis was over. Over time, however, the new laws and rules governing banking and markets succeeded. With the protections these regulations provided, bad banks could fail and bad ideas could die, allowing markets to discipline the financial world without unduly harming the economy.”)
economic downturns and to promote efficient markets.\textsuperscript{196} Robert J. Samuelson sums up the mindset of those embracing deregulation:

Government was less activist, and the economy improved....The stock market...was almost 12 times higher than in 1982. Housing prices followed a similar, if less steep, upward trajectory...People took note. The lessons of this great reversal slowly seeped into popular and expert consciousness. Assumptions shifted; beliefs changed. Government economic management, it seemed, succeeded more by doing less...Left largely alone, financial markets mostly trended upward, as did home prices. Markets seemed largely self-correcting.

The election of conservative Ronald Reagan combined with relative stability in financial markets (ignoring the Savings and Loans crisis and the devastating one-day stock market crash known as “Black Monday” in October 1987) and intense lobbying by Wall Street brought about financial deregulation.\textsuperscript{197} However, the Reagan Administration only ushered in the Era of Deregulation. Both Presidents Clinton and George W. Bush signed into law legislation that ceded further control of financial markets to market participants.\textsuperscript{198} Glass-Steagall was viewed as unwanted relic of the Great Depression.\textsuperscript{199}

\textsuperscript{197} Gordon S. Murray, “Presentation to Congress,” March 11, 2010 (quoting, “As a former managing director at two major Wall Street firms, I remember the pressure from both to contribute to our political action committees. While writing that check was not mandatory, we all knew that our senior leadership was aware of who contributed (and that as much as 90 percent of our total compensation was in the form of a subjective, discretionary bonus). One year, after viewing a list of the senators and congressman who were recipients of our largesse, I asked two management committee members at my firm if we (as a firm) had to do this. Forever, I’ll remember their verbatim replies: “Because we own them” and “Because those idiots in Washington will continue to whatever we want them to do.”)
\textsuperscript{198} Matthew Dallek, “Not Ready for Mt. Rushmore: Reconciling the myth of Ronald Reagan with the reality,” The American Scholar, Summer 2009 (quoting, “The icing on [Reagan’s] reputation came during the eight years of George W. Bush’s presidency, when conservative ideology dominated the national conversation.”); But deregulation of OTC credit derivatives markets was also embraced by President Clinton’s Treasury Secretary, Larry Summers. For example, See Office of Public Affairs—Treasury Department, July 30, 1998, http://www.treas.gov/press/releases/rr2616.htm. (quoting Summers, “Mr. Chairman, for the past ten years, there has been an implicit consensus that the OTC derivatives market should be allowed to grow and evolve without deciding the various questions concerning the potential applicability of the CEA [Commodities Exchange Act] to any of these transactions. At the heart of that consensus has been a recognition that ‘swap’ transactions should not be regulated as contracts subject to the

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Given the global nature of financial markets, self-regulation was lauded for its adaptability to both foreign and domestic markets. Alan Greenspan, then-Chairman of the Federal Reserve, maintained that “financial companies, powered by a rational motive not to lose money, could police themselves and one another.” In these heady times, the self-regulatory model was viewed as the model for growing markets and enabling financial innovation. Sir Howard Davies, former head of Great Britain’s Financial Services Authority (the U.K. equivalent of the U.S. Department of the Treasury), characterizes the past couple decades as ones in which regulators were expected to be somewhat subservient to financial institutions. Generous campaign contributions to Republicans and Democrats only helped to reaffirm this notion.

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199 John Cassidy, “Hedging America,” The New Republic, December 30, 2009 at 37, (noting that proponents of free markets “argue against taxes and regulation in general—[which] are distortions—and in favor of laissez-faire. Any interference with the free market, they declaim, is ipso facto a bad thing.”)

200 Niall Ferguson, The Ascent of Money, Penguin Books, 2008 at 9 (quoting, “So intricate had our global financial system become, that relatively poor families in states from Alabama to Wisconsin had been able to buy or remortgage their homes with often complex loans that (unbeknown to them) were then bundled together with other, similar loans, repackaged as collateralized debt obligations (CDOs) and sold by banks in New York and London to (among others) German regional banks and Norwegian municipal authorities, who thereby became the effective mortgage lenders.”); Ferguson, Id. at 270, (quoting, “The risk was spread across the globe from American state pension funds to public health networks in Australia and even to town councils beyond the Arctic Circle. In Norway, for example, the municipalities of Rana, Hennes, Hattjelldal and Narvik invested some $120 million of their taxpayers’ money in CDO secured on American subprime mortgages.”)


204 Alan Murray, “Getting Started,” Wall Street Journal, December 14, 2009 at R4 (quoting, “The political mood, and certainly the mood in the markets, was that regulators should observe how markets evolved and
Roderick M. Hills, chairman of the SEC during President Ford’s administration noted, “It’s a fair criticism of the Bush administration that regulators have relied on many voluntary regulatory programs. The problem with such voluntary programs is that, as we’ve seen throughout history, they often don’t work.”

Then SEC chairman, Christopher Cox, acknowledged in hindsight that SEC’s regulations should not have been “suggestions.” He continued, “The fact these companies could withdraw from voluntary supervision at their discretion diminished the mandate of the program and weakened its effectiveness.”

George Soros, the fantastically successful hedge fund manager and a vocal critic of deregulation, succinctly noted “Markets fail, but regulators fail as well.”

In 1993, the Commodities Futures Trading Commission, whose jurisdiction covered a broad swath of swap instruments, exempted all swaps like CDS that were not traded

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206 Stephen Labaton, Id.

207 Nelson D. Schwartz and Louise Story, “Pay of Hedge Fund Managers Roared Back Last Year,” NY Times, March 31, 2010 at http://www.nytimes.com/2010/04/01/business/01hedge.html (quoting, “The runner-up in the ranking was George Soros, the Hungarian émigré who has become better known in recent years for supporting Democratic candidates and making political headlines than for picking stocks. His fund, Quantum Endowment, grew 29 percent in 2009, earning Mr. Soros $3.3 billion in fees and investment gains... Three managers among the top 10 — Mr. Soros (No. 2), James Simons (No. 3) and John Paulson (No. 4) — were back-to-back winners, having profited during the lean times of 2008 as well as in the booming market of 2009.”); Frank Partnoy, F.I.A.S.C.O: The Inside Story of a Wall Street Trader, Penguin Books, 1997 at 97 (quoting, “Soros is, if not the world’s smartest expert on derivatives, at least the world’s richest one. [His hedge fund] Quantum [Group of Funds] has been recognized as having had the best investment performance record in the world during its twenty-five-year history.”)

208 Alan Murray, “Fixing Global Finance,” Wall Street Journal, December 14, 2009 at R1; Michael Lewis, The Big Short, at 166 (quoting, “A friend at the [Wall Street] Journal hooked them up with the enforcement division of the SEC, but the enforcement division of the SEC had no interest either...As they spoke, they sensed the audience’s incomprehension. ‘We probably had like this wild-eyed we’ve–been-up-for-three-days-straight look in our eyes,’ said Charlie. ‘But they didn’t know anything about CDOs, or asset-backed securities. We took them through our trade but I’m pretty sure they didn’t understand it.’ The SEC never followed up.”)
through “a multilateral transaction execution facility.” In the late 1990s, the deep pockets and cozy relationships between Wall Street bankers and Washington produced the Gramm-Leach-Bliley Financial Services Modernization Act (GLB), which removed the barrier between commercial and investment banking instituted by The Glass-Steagall Act. The enactment of the GLB meant that commercial banks would no longer be forbidden from engaging in riskier investment banking—commercial banks could now take greater risks using greater leverage. For example at Lehman Brothers, one trader “had virtually unlimited use of Lehman’s balance sheet and used it to turn the firm into an all-in, unhedged play on the U.S. real estate market, a giant REIT (real estate investment trust) with a little investment bank attached—a strategy that worked extraordinarily well right up until the moment that it didn’t.”

The GLB also amended §4 of the Bank Holding Company Act to create a new banking entity known as a financial holding company (FHC). Through FHCs, commercial banks and insurance companies could now undertake any financial activity deemed “complementary” that did “not pose a substantial risk to the safety or soundness of depository institutions or the financial system generally.” Made wealthy by the Federal Reserve’s expansionary monetary policy, Wall Street firms through their FHCs

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210 Nicole Gelinas, Id. at 26 (“The financial industry, buoyed by an implicit government subsidy, became an even stronger force in Washington with its lobbyists, campaign contributions, and even cultural influence. It became harder and more politically costly for policymakers and regulators to rein in the industry’s power.”)
212 Andrew Ross Sorkin, Too Big to Fail. at 122.
213 GLB §103(k)(1)(B).
214 Niall Ferguson and Ted Forstmann, “Back to Basics on Financial Reform,” Wall Street Journal, April 23, 2010 at A19 (quoting, “A very large part of the responsibility for the housing bubble and bust lies with the Federal Reserve, which underestimated the extent to which inflationary pressures had relocated themselves from consumer prices to asset prices.”)
engaged in dubious financial engineering and risk-taking that initially produced phenomenal profits and eventually lead to the Great Panic.\textsuperscript{215} The traditional way of doing business had been cast aside in favor of “lean operations focused on trading and risk taking, much of it in mortgage debt, to crank out huge profits.”\textsuperscript{216} Of course, trading profits did not go straight to the bottom line or at least not all of it. To increase profitability, compensation was not based on what an employee had earned for the company on an annual or biannual basis. Prior to the Great Panic, publicly traded financial institutions in pursuance of beating stock analyst estimates and their own ambitious quarterly projections incentivized short-term gains by basing compensation in part on what a trader could produce in a day or a week’s time.\textsuperscript{217} Profit was of primary importance; risk was an afterthought—a mere footnote on a financial statement.\textsuperscript{218}

The deregulation of Wall Street continued into the first decade of the 21st century. In 2000, Congress then passed the Commodities Futures Modernization Act (CFMA), establishing that “swap agreements” or “any individually negotiated contract, agreement, warrant, note, or option that is based, in whole or in part, on the value of, any interest in, or any quantitative measure or the occurrence of any event relating to, one or more

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\item GLB § 103(k); David Leonhart, “Washington’s Invisible Hand,” New York Times Magazine, September 26, 2008, \url{http://www.nytimes.com/2008/09/28/magazine/28wwln-reconsider.html} (quoting, “The point of Gramm-Leach-Bliley was to tear down the wall, built by Glass-Steagall, separating banks that did risky investing from those that did basic lending.”); “Gramm-Leach-Bliley Act: A New Frontier in Financial Services,” \url{http://www.frbsf.org/publications/banking/gramm/index.html}; William D. Cohan, \textit{House of Cards} at 277 (quoting, “The consequences of Greenspan’s monetary policy would soon be felt—with dramatic consequences—across the global financial markets…”Two things happened. [Banks and insurance companies] took on more and more leverage, and they reached for riskier asset classes. Give me yield, give me leverage, and they reached for riskier asset classes. Give me yield, give me leverage, give me return.”)
\item Charles Gasparino, \textit{The Sellout}, Harper Business, 2009 at 310.
\item Charles Gasparino, \textit{The Sellout}, Harper Business, 2009 at 318 (See footnote __ in regards to the ‘liquidity put’ offered by Citigroup to best Merrill Lynch as the largest CDO underwriter that exposed the largest financial institution in the world to $25 billion in liabilities and which had been referenced only in the footnotes of its financial statements.)
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commodities, securities, currencies, interest or other rates, indices, or other assets," were be exempt from regulatory oversight.\(^{220}\) The CFMA made clear: credit derivatives were off-limits to regulators.

More than a decade before the Great Panic, George Soros warned of the dangers posed by derivative instruments, “There are so many of them [derivatives], and some of them are so esoteric, that the risks involved may not be properly understood even by the most sophisticated of investors.”\(^{221}\) Although the Commodities Futures Trading Commission (CFTC) had been tasked with the responsibility for “harmonizing [the] regulatory framework for derivative instruments,\(^{222}\) its attempts to exert greater influence over credit derivatives markets had been sternly rebuked by Congress and by other regulators.\(^{223}\) In highly dynamic markets where “changes [were regularly] taking place,” regulatory agencies like the SEC or the CFTC were thought to be incapable of effectively monitoring OTC derivatives markets.\(^{224}\)

\(^{219}\) CFMA § 206(b).

\(^{220}\) CFMA § 206(A)(b).


\(^{223}\) Daniel Altman, “Derivatives: Corporate Financial Leverage Wrapped in Enigma,” June 11, 2003, \url{http://www.nytimes.com/2003/06/11/business/derivatives-corporate-financial-leverage-wrapped-in-enigma.html} (quoting, “A few months before Long-Term Capital Management (LTCM) was bailed out with Federal Reserve help in 1998, Brooksley Born, then head of the Commodity Futures Trading Commission, suggested regulating some aspects of the derivatives market. She was rebuffed by traders and regulators. And even after the spectacular failure of the giant hedge fund [referring to LTCM] -- and Enron's collapse three years later—disagreements about how to price derivatives and the proper level of disclosure have stood in the way of regulation.”); Office of Public Affairs—Treasury Department, July 30, 1998, \url{http://www.treas.gov/press/releases/rr2616.htm} (quoting, “The CFTC concept release, even though it purports to do no more than pose questions, upsets this fragile consensus because it suggests that the CFTC is at least considering imposing a significant new regulatory requirements on the OTC derivatives market. This, in turn, can only be based on a belief that many swaps are subject to CFTC jurisdiction as futures contracts and might appropriately be regulated as such. As I have indicated, we do not agree with this conclusion. It is our view, and that of both the Federal Reserve and the SEC, that swaps are not futures under the CEA. Thus, the Administration proposed temporary legislation to alleviate the legal uncertainty created by the release while more permanent solutions are considered.”)

ii. Self-Regulation Fails to Control Risk

The presumption underlying all of this was that market participants—i.e. banks, insurance companies and hedge funds—were “expert, knowledgeable managers of wealth.” Sophisticated market participants would then be “motivated and able to estimate risks fairly, foresee pitfalls, price accordingly, and keep each other honest.” Market participants not regulators would be responsible for devising “solutions best fitted to the conditions that [exist] in the market, a task for which they…are best suited because of their day-to-day experience.” During the “Era of Deregulation,” In hindsight it became clear that Wall Street was not up to the task of policing itself. Professor James D. Cox, a securities and accounting law expert at Duke School of Law, acknowledged, “We foolishly believed that the firms had a strong culture of self-preservation and responsibility and would have the discipline not to be excessively borrowing.” Financial “incentives were often perverse [and] short-run greed overcame long-run caution, information was hidden or badly processed, and the complexity of financial

225 Robert M. Solow, “Hedging America,” The New Republic, December 30, 2009 at 39-40; Martin McLaughlin, “Clinton, Republicans agree to deregulation of US financial system,” World Socialist Web Site, 1 November 1999, http://www.wsws.org/articles/1999/nov1999/bank-n01.shtml; Gordon S. Murray, “Presentation to Congress,” March 11, 2010 at 7 (quoting, “Remember that Wall Street professionals practice finance full time. Certainly you can understand the difference when a Wall Street broker transacts with a sophisticated counterparty such as Pimco and Cal Pers and an individual investor like ‘Grandma’ who does not know if those municipal bonds have been marked up by three points. In this respect, Congress too is ‘Grandma.’”)
226 Robert M. Solow, “Hedging America,” The New Republic, December 30, 2009 at 39-40; Geoff Colvin, “Alan Greenspan Fights Back,” Fortune, March 1, 2010 at 88 (quoting, “This bubble was catastrophic because self-interest failed. At Bear Stearns, Lehman Brothers, AIG, Citigroup, Merrill Lynch, and others, the firm’s interest in its own profits should have stopped the housing bubble insanity.”)
227 John Cassidy, “Hedging America,” The New Republic, December 30, 2009 at ___ (quoting, “Under the system of “self-regulation” adopted by American and European banking regulators, many big financial institutions, such as Citigroup, Barclays, and Union Bank of Switzerland, were allowed to rely on their internal risk-management systems. The only outside check on their activities came from commercial ratings agencies, such as Moody’s and Standard & Poor’s, which depended on the banks’ fees for business.”)
engineering [eventually outstripped] the capacity for rational calculation.”

Malcolm Gladwell writes:

[Hedge fund manager, John] Paulson, for his part, was stunned at the reckless behavior of his Wall Street counterparts. Some of the mortgage bundles he was betting against—collections of some of the sketchiest subprime loans—were paying the investors who bought them [a relatively low yielding] six-per-cent interest. Treasury bonds, the safest investments in the world, were paying almost five per cent at that point. Nor could he comprehend why so many banks were willing to sell him C.D.S. insurance at such low prices. Why would someone, in the middle of a housing bubble, demand only one cent on the dollar?…These are supposedly the smart people.

In the midst of record-breaking profits and huge bonuses, somewhere along the way the risk of catastrophic failure was downplayed, ignored or simply not understood.

This failure to properly police themselves is a problem common amongst groups left solely responsible for achieving “a set of common goals.” Mancur Olson referred to this as a “collective action problem” in which “rational, self-interested individuals [are unable to] act to achieve their common or group interest.” More simply put, when rules are voluntary or left to the discretion of the regulated, no one is willing to act first to conform their activities to voluntary rules. Without coercion and oversight, the financial industry could not be counted on to behave in its own self-interest or to act in concert to control systemic risk. Paul Samuelson, a well-respected economist,
writes “Today we see how utterly mistaken was the Milton Friedman notion that market system can regulate itself. We see how silly the Ronald Reagan slogan was that government is the problem, not the solution. This prevailing ideology of the last few decades has now been reversed. Everyone understands now, on the contrary, that there can be no solution without government.”

Perhaps warped by increasingly larger bonuses and the trappings of success, self interest on Wall Street could not be relied upon to control systemic risk. One of the notable failures of self regulation was the collective inability or unwillingness amongst participants to reduce risk exposure. Greenspan argues “Self-interest failed…mainly because no one, including himself, understood the costs of the extremely unlikely risks the big banks faced…’Counterparty surveillance failed to protect the system this time.’”

III. Regulating Securitization and Credit Derivatives

A. Financial Reform Is Sorely Needed

In the immediate aftermath of the Great Panic, increased regulator oversight in the financial sector was expected and in some cases welcomed. Richard Posner, an

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236 [http://homepage.newschool.edu/het/profiles/samuelson.htm](http://homepage.newschool.edu/het/profiles/samuelson.htm) (quoting, Perhaps more than anyone else, Paul A. Samuelson has personified mainstream economics in the second half of the twentieth century. The writer of the most successful principles textbook ever [Foundations of Economic Analysis] (1948), Paul Samuelson has been not unjustly considered the incarnation of the economics "establishment" - and as a result, has been both lauded and vilified for virtually everything right and wrong about it.)


esteemed 7th Circuit Appellate Court judge and a founder of the “Chicago School” whose free-market theories “guided deregulation [over] the past thirty years,” recently pulled a philosophical about-face in calling for financial regulation to avert future financial crises. Judge Posner’s position perhaps represents a significant paradigm shift away from deregulatory principles that have dominated since the Reagan Administration. Though a “champion of free markets,” Adam Smith, the father of capitalism, denounced those in charge of corporations as an “order of men whose interest[s] [are] never exactly the same with that of the public, and who accordingly have, upon many occasions, both deceived and oppressed it.” Echoing this sentiment, CFTC chairman, Gary Gensler, declared, “Wall Street’s interest is not always the same as the public’s interest. Wall Street thrives and makes money in inefficient markets.”

B. Reforming the Process of Securitizing Mortgages

i. Margin Requirements –Skin in the Game
It has been hypothesized that the process of securitization in the home mortgage market depersonalized the relationship between lenders and mortgagors (no longer was the home owner’s mortgage the property of the local bank). The “depersonalization” of lending made it easier psychologically for mortgagors with negative equity to walk away increasing the likelihood of MBS defaults. Securitization also degraded lending standards by making it easier for local community banks to make risky loans and sell those mortgages to larger financial institutions who then packaged them into collateralized debt obligations and other types of mortgage-backed securities. To increase the appreciation of risk, some have proposed that banks be required to hold “5 per cent of the loans originated so they have ‘skin in the game.’” Skin in the game means those originating the loan should retain some financial interest in the loans it created. This requirement should reduce the profitability of securitization, and increase the appreciation of risks associated with MBS.

ii. Transparency

245 Aline Van Duyn, “‘A Business Decision,’” Financial Times, February 23, 2010 at 7 (quoting, “Shasta Gaughen, a 39-year old PhD graduate in anthropology…a few weeks ago stopped paying her mortgage…”The biggest problem is trying to convince myself it is not morally wrong to walk away. I’m approaching my home as an investment that went bad. I’m not stealing anything, the bank will get my property.”); Charlotte Cuthbertson, “Homeowners Who ‘Strategically Default’ Are Under Moral Pressure,” The Epoch Times, April 15-21, 2010 at A1 (quoting, Jodi Romanello and her husband walked away from this house in Port St. Lucie, Florida, after their mortgage payments suddenly increased. Romanello says to homeowners that if a house is worth less than 70 percent of the mortgage, they should consider strategically defaulting.”); Suzanne Kapner, “Setback for US Mortgage Sector,” Financial Times, April 30, 2010 at 6 (quoting, “The number of so-called strategic defaults spiked to 31 per cent of all US foreclosures in March, up from 22 per cent a year ago…The researchers also found that borrowers are 23 per cent more likely to strategically default on their mortgage once their neighbours walk away from their homes…Jon Maddux, the chief executive of You Walk Away, which, for a fee, guides homeowners through the foreclosure process [stated] ‘People are starting to change their way of thinking. It’s almost become trendy to walk away from your home.’”)


247 Robert Pozen, Too Big to Save?, John Wiley & Sons, Inc., 2010 at 54 (quoting, “This full capitalization requirement would undermine the profitability of the securitization process to banks.”)

54
The publicly traded equity markets (i.e. NYSE, NASDAQ) stand in sharp contrast to bond markets. Michael Lewis writes, “It was possible to get ripped off by the big Wall Street firms in the stock market, but you had to work at it. The entire market traded on screens, so you always had a clear view of the price of the stock of any given company. The stock market was not only transparent but heavily policed...The presence of millions of small investors had politicized the stock market. It had been legislated and regulated to at least seem fair.”

In contrast, bond markets remain remarkably nontransparent to this day. By exploiting asymmetries of information, bond salesmen have long had an unsavory reputation. Michael Lewis notes, “The opacity and complexity of the bond market was, for big Wall Street firms, a huge advantage. The bond market customer lived in perpetual fear of what he didn’t know...In the bond market it was still possible to make huge sums of money from the fear, and the ignorance, of customers.” Particularly with regard to fees, financial institutions profit from the lack of transparency in bond markets (the sole exception being Treasury bonds).

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248 Michael Lewis, *The Big Short* at 61.
249 InvestorWords.com, http://www.investorwords.com/2461/information_asymmetry.html (Defining “asymmetry of information” as a “Condition in which at least some relevant information is known to some but not all parties involved. Information asymmetry causes markets to become inefficient, since all the market participants do not have access to the information they need for their decision making process.”)
250 Michael Lewis, *The Big Short*, at 92 (quoting, "The problem with someone [like Deutsche Bank bond salesman, Greg Lippman] who is transparently self-interested is that the extent of his interests is never clear..."Fucking Lippman never looks you in the eye when he talks to you. It bothers the shit out of me." Vinny could not believe that Deutsche Bank would let this guy loose to run around and torpedo their market unless it serves the narrow interests of Deutsche Bank. To Danny and Vinny, Greg Lippman was a walking embodiment of the bond market, which is to say he was put on earth to screw the customer.")
251 Frank Partnoy, *F.I.A.S.C.O: The Inside Story of a Wall Street Trader*, Penguin Books, 1997 at 200 (quoting, ""Several people were thinking about leaving the firm for the 'buy side.' Morgan Stanley and other investment banks were called the 'sell side' because we sold bonds to investors. Mutual funds, hedge funds, and other asset managers were the 'buy side' because they bought bonds from us. One salesman explained the difference to me, as follows: "Do you know what the difference is between the buy side and..."
Achieving the level of transparency found in equity markets in mortgage-backed bond markets is perhaps a bridge too far. Nevertheless, investors will benefit from greater access to “performance data on a daily basis on the individual loans that support the securitization and the implication of this performance for each part of the structure of the securitization.” Currently, only “pool-level” data is available to investors—meaning that only general characteristics such as average FICO scores and the average number of no-doc loans are disclosed. Investors in CDO markets have no ability to determine the material “loan-level” characteristics of the individual loans serving as collateral. Shockingly, such information was not even disclosed to rating agencies like Moody’s, Standard & Poor’s and Fitch who rated CDOs. One former S&P subprime mortgage bond analyst testifying before Congress introduced an e-mail from his then-managing director, which stated, “Any request for loan-level [data] is TOTALLY UNREASONABLE!! Most originators [the investment banks creating the CDOs] don’t have it and can’t provide it. Nevertheless we MUST produce a credit estimate…It is your responsibility to provide those credit estimates and your responsibility to devise some method to do so.”

Rather than rely on credit rating agencies, more attention needs to

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253 Michael Lewis, The Big Short at 170.
254 Michael Lewis, The Big Short at 170-1 (quoting, “[An employee of Standard and Poor’s] Ernestine Warner was working with the same rough information available to traders like Eisman. This was insane: The arbiter of the value of the bonds lacked access to relevant information about the bonds. ‘Then we asked her why,’ said Vinny, ‘she said, ‘The issuers won’t give it to us.’ That’s when I lost it. ‘You need to demand to get it!’ She looked at us like, We can’t do that. We were like, ‘Who is in charge here? You’re the grown up. You’re the cop! Tell them to fucking give it to you!!’ Eisman concluded that ‘S&P was worried that if they demanded the data from Wall Street, Wall Street would just go to Moody’s for their ratings.’”
255 Michael Lewis, The Big Short at 171; Robert Pozen, Too Big to Save?, John Wiley & Sons, Inc., 2010 at 67 (quoting, “The role of credit-rating agencies in the mortgage securitization process was deplorable.
be paid to illuminating bond markets that for too long have obscured and inflamed default
risk and overcharged investors. Providing such information on a regular (if not daily)
basis will enable ordinary investors to “evaluate the risk and return of the securitization in
both the primary and secondary markets.”

C. Principles of Reform in Credit Derivatives Markets

i. Transparency

a. Price Discovery

Just as in bond markets, financial institutions sought to capitalize on the lack of
transparency in derivatives markets. Comparing exchange-traded derivatives with
their over-the-counter counterparts, Frank Partnoy, a former Morgan Stanley derivatives
trader in the 1990s, writes, “To get information about an exchange-traded derivative, you
can simply look in the Wall Street Journal or call a broker. In contrast, you might never
be able to discover certain information about an OTC derivative unless you worked in the
derivatives group at an investment bank.” Although OTC derivatives markets had
come “from nowhere in the early 1980s to become the biggest financial set of products in
the universe at the moment, paradoxically, the level of knowledge and expertise on these
instruments frequently [remained] woefully low.” In his Wall Street memoir, Frank
Partnoy writes:

They gave top ratings to many securities backed by mortgages that soon began to default at above average
rates.”

Report at 2.

(quoting, in the mid 1990s, “[Former SEC] Commissioner Richard Roberts expressed concern that ‘some
derivative products are being marketed more the fat profit margin they make available to the securities firm
than for their suitability to the customer.’”)


259 Stephen Fidler, Id.
Learning about derivatives [in 1999] poses the same problem I faced in February 1994: Only a handful of derivatives salesmen [knew] the closely guarded secrets of how derivatives [were] actually used, and those elite few [had] no reason to share secrets worth millions of dollars with me or you….Even for me as a derivatives salesman at [investment bank] First Boston, it was almost impossible to learn the details of the most profitable derivatives deals on Wall Street. Imagine how difficult it still must be for journalists and regulators, who [could] learn only what the derivatives insiders are willing to tell them.\textsuperscript{260}

OTC derivatives would only get more complex in the 21\textsuperscript{st} century on Wall Street. Over the past decade as OTC derivatives expanded and mutated, their opacity caused risk to be hidden from counterparties and regulators.\textsuperscript{261} During the Great Panic, the absence of transparency combined with mounting illiquidity and insolvency problems at many Wall Street institutions. No one knew anything for certain—traders and fund managers, desperate for information, were forced to rely upon rumor and innuendo being spread clandestinely through emails, text messages and phone calls.\textsuperscript{262} Steve Eisman,\textsuperscript{263} a hedge fund manager at FrontPoint, exclaimed, “There’s no limit to the risk in the market. A bank with a market capitalization of one billion dollars might have one trillion dollars’ worth of credit default swaps outstanding. No one knows how many there are! And no one knows where they are!”\textsuperscript{264} Echoing Eisman’s perspective, perhaps less apoplectically, William D. Cohan writes:

Just as it is more than valid to wonder what A.I.G. was thinking in the first place by insuring all of these crazy risks, it is also all but certain that these monthly disputes — between first Goldman Sachs and A.I.G., and then between A.I.G. and all its other counterparties — almost certainly precipitated the insurance

\textsuperscript{260} Frank Partnoy, \textit{Id.} at 30.
\textsuperscript{261} Stephen Fidler, “Financial Innovation,” Wall Street Journal, December 14, 2009 at R6 (quoting Thomas Callahan, CEO of NYSE Liffe U.S., “Lack of transparency was one of the core issues of the financial crisis.”)
\textsuperscript{263} Eisman is notably portrayed in Michael Lewis’s \textit{The Big Short} as one of few on Wall Street that was able to discern the makings of the Great Panic prior to the fall of Bear Stearns and, consequently, made billions for his hedge fund, himself and his clients by successfully shorting the U.S. MBS market.
\textsuperscript{264} Michael Lewis, \textit{The Big Short}, at 263.
company’s collapse and its subsequent bailout. But given the secretive nature of
the over-the-counter market, it’s hard to piece together exactly what occurred. 265

At the height of the financial crisis, the absence of transparency in CDS markets helped
to deflate investor and counterparty confidence in financial institutions leading to sell offs
in other, more liquid markets—Fortune 500 companies with multinational operations
throughout the world would be caught up in the whirlwind that began with the dubious
(arginally, nefarious) packaging of risky mortgages.

In the aftermath of the Great Panic, market participants have started to embrace the
notion that financial markets are strengthened by market-based forms of enhanced
transparency. 266 Harvard professor, Niall Ferguson, and private equity expert, Ted
Forstmann, writing together in a Wall Street Journal Op-ed, “History shows that
competitive markets where standardized products are traded for low commissions do not
spontaneously arise. They have to be created.” 267 Darrell Duffie of Stanford
University’s Hoover Institute writes, “The most important ingredient for market
efficiency is competition, which in turn depends on price transparency” 268—given that
“markets tend to be more efficient when the ‘going price’ is well known by market
participants.” 269 Investors are then able to find the “most competitive market prices” 270

http://opinionator.blogs.nytimes.com/2010/01/21/a-bomb-squad-for-wall-street/

266 Senator Chris Dodd, Chairman of the Committee on Banking, Housing, and Urban Affairs, “Summary: Restoring American Financial Stability – Discussion Draft,”
more derivatives on regulated exchanges should be encouraged because it will result in more price
transparency, efficiency in execution and liquidity.”)
23, 2010 at A19.
268 “How Should We Regulate Derivatives’ Markets?” Defining Ideas, Hoover Institute, 2010 Number 1 at 19.
269 Darrell Duffie, “How Should We Regulate Derivatives’ Markets?” Defining Ideas, Hoover Institute,
2010 Number 1 at 21.
and to make “informed judgments about market integrity and the credit worthiness of borrowers and counterparties.”

b. Clearinghouses

Recent history has shown that regulators can not be relied upon to contain systemic risk.\(^{272}\) Instituting clearinghouses will force CDS “out into the sunlight where they can be monitored.”\(^{273}\) While reducing systemic risk, increasing transparency will not be without cost. Noted mathematician and author, Nassim Taleb, provides the following analogy, “The dark side of the moon is harder to see; beaming light on the unseen is costly.”\(^{274}\) Goldman Sachs CEO, Lloyd Blankfein, argued before the House Financial Services committee that subjecting most OTC derivatives to clearing “will do more to enhance price discovery and reduce systemic risk than, perhaps, any specific rule or regulation.”\(^{275}\) The principal objective in instituting a clearinghouse is to “prevent the default of one market participant from spreading ‘counterparty risk’ throughout the financial system…[resulting] in a dangerous ripple effect” like the one that occurred in

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271 Dickinson, *Id.*; Jonathan R. Laing, “Defusing the Credit-Default Swap Bomb,” Barrons, November 17, 2008, [http://online.barrons.com/article/SB122671604643530511.html](http://online.barrons.com/article/SB122671604643530511.html), (quoting “A central clearinghouse -- which would have the collective financial backing of all its members -- would aggregate all trades, impose stringent margin and mark-to-market requirements and be the single counterparty that all players must deal with.”)

272 Oliver Hart and Luigi Zingales, “Curbing Risk on Wall Street,” National Affairs, Volume 3, Spring 2010 at 24 (quoting, “Any successful mechanism to contain the risks that large financial institutions take, and so as to avoid future bailouts, would therefore have to be driven not by refereeing institutions but by the market itself.”)


2008 when Lehman declared bankruptcy.  

A clearinghouse “stands between buyers and sellers [and ensure] that accounts are settled properly when trades are made and…margin requirements [are] met.” By acting as a buyer to every seller and a seller to every buyer, the clearinghouse reduces counterparty risk by fulfilling the trade “even if one party defaults”—“provided that the clearinghouses are themselves well designed and capitalized.” In addition to minimizing counterparty risk, instituting “twice-daily ‘mark to market’ [clearing] prevents the buildup of significant losses and effectively wipes clean the credit risk inherent in the system—reducing the likelihood of ‘run-on-the-bank behavior that likely quickened the failures of Bear Stearns and Lehman.”

Periodic disclosures via a clearinghouse will diminish “the likelihood that large losses by a trader will cause a contagion event.”

CFTC Chairman Gensler warned, “‘The lack of good knowledge by regulators [about OTC derivatives] is not a tenable long term equilibrium.’” Proponents of clearinghouses for OTC derivatives argue that they would better control systemic risk by allowing “creative financial risk-taking…[to] flourish within reasonable limits.”

Forcing OTC derivative instruments onto clearinghouses will increase the information (i.e. pricing and leverage ratio) available to regulators and investors. Currently, the

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279 Darrell Duffie, “How Should We Regulate Derivatives’ Markets?” Defining Ideas, Hoover Institute, 2010 Number 1 at 21.
281 Duffie, Id. at 21.
282 Walter Lukken, Id.
283 Aline van Duyn, “CFTC Urges End to Derivatives Secrecy,” Financial Times, March 10, 2010 at 15.
284 Nicole Gelinas, “Too Big Not To Fail,” National Affairs, Number 2, Winter 2010 at 33.
private, bilateral trade of derivatives leaves “competitors and regulators in the dark about the scope of their risks.”

In absence of clearing houses in derivatives markets, it is estimated that Wall Street banks earn $35 billion each year by “acting as matchmakers between parties to derivatives contracts.” CFTC Chairman Gensler noted, “The only parties that benefit from a lack of transparency are Wall Street dealers…Right now we have a dealer-dominated world, and that nearly drove us off a cliff.”

To retain higher margins in opaque derivatives markets, some financial institutions have “lobbied heavily against requiring credit default swaps to be traded in an open market and to be properly collateralized.” Despite the danger, the International Swaps and Derivatives Association, which represents Wall Street, has warned that its members may stop participating in these markets if prices and trading positions are disclosed publicly—all of which would drive up the cost of borrowing.

Despite their pecuniary interest in the status quo, the chief executive officers of leading Wall Street firms, JP Morgan, Morgan Stanley and Goldman Sachs, have expressed their support for instituting clearinghouses in these markets. JP Morgan CEO, Jamie Dimon, stated resolutely “Anything that can be cleared ‘should be cleared.’”

In July of 2010, President Obama signed into law the Wall Street and Consumer Protection

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289 Graham Bowley, Id. at B4.
Act (the Dodd-Frank Act). The Dodd-Frank Act will inject transparency into OTC markets by instituting clearinghouses that enable greater standardization of credit derivative instruments, enhancing disclosure requirements and minimizing destabilizing counterparty risk. The adoption of clearinghouses in exchange-traded markets has already proved to be successful in controlling risk in commodity markets.  

One risk remains unaddressed by the Dodd-Frank Act. That is, if clearinghouses are successful in clearing derivative trades, they become systemically important. Yet, it remains unclear how systemic risk would be contained if a clearinghouse itself were to fail.

c. Not All Derivatives Can Be Standardized or Cleared

Not all credit derivatives, however, can be cleared. Robert Pozen, Chairman of MFS Investment Management, writes “Congress should recognize that there is a legitimate need among industrial companies for customized CDS contracts that are not appropriate for a clearinghouse.” To compensate for the additional risk not alleviated through a clearing house, customizable CDS should be subject to a “substantially higher capital charge than standardized CDSs.” Non-financial companies often use highly customized OTC credit derivatives that are “tailored to the exact value of a product” for import or export. Given their specific purpose, standardization of such derivatives instruments is not possible. Moreover, it is inefficient to force “those with commercial

291 Bank for International Settlements, “Clearing Arrangements for Exchange Traded Derivatives,” March 1997, http://www.bis.org/publ/cpss23a.pdf, (noting that markets for exchange-traded derivatives reduce systemic risk by providing “sufficient liquidity to allow them to offset their market risk exposures quite promptly, even during episodes of market volatility when other financial markets may be relatively illiquid.”); “Review of Credit Derivatives,” Oral Testimony of CFTC Acting Chairman Walter Lukken Before the House Committee on Agriculture, October 15, 2008 (noting that clearinghouses have long been used to minimize “the risk that one counterparty’s default will cause a systemic ripple through the markets.”)


293 Robert Pozen, Too Big to Save?, John Wiley & Sons, Inc., 2010 at 81-82.

294 Pozen, Id. at 82.

needs for hedging…into standard derivatives’ positions that are relatively poor hedges.”

As a means of controlling systemic risk without clearing, firms trading in these types of customizable derivatives should be required to hold additional capital to offset the lack of transparency.

Of course, the ability to customize derivative products is not in and of itself a bad thing. As professors Oliver Hart and Luigi Zingales note, “The problem…was not with credit default swaps as such, but with the way they were traded.”

By and large, the customizable credit derivatives traded by non-financial firms was not a cause of the last financial crisis. The desire to standardize these products likely stems from the concern that exempting certain types of credit derivatives from clearing will encourage financial institutions to develop more derivatives tailored to fit these exemptions. The fear among regulators like Treasury Secretary Geithner is that by allowing exemptions for industrial and agricultural companies these exceptions could swallow the rule—eroding the systemic protections provided by derivatives clearinghouses. To prevent this, regulatory oversight is needed to ensure that customizable derivatives are not an acute source of systemic risk.

ii. Margin Requirements and Leverage Limits

The Great Panic made plain the danger in making hundreds of billions of dollars worth of promises to insure against credit defaults without holding sufficient cash or

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296 Darrell Duffie, “How Should We Regulate Derivatives’ Markets?” Defining Ideas, Hoover Institute, 2010 Number 1 at 21.
297 Alan Greenblatt, Id. at 446.
299 Tom Braithwaite, “Treasury Chief Hardens Stance on Derivatives,” Financial Times, April 19, 2010 at 3 (quoting, “But Mr. Geithner looks set on pushing for minimal exemptions and maximum use of exchanges. ‘It is critical that any exceptions not be exploited.’”)

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liquid assets on reserve. Oliver Hart and Luigi Zingales argue that CDS are “not bad per se,” but they can be destabilizing “if not properly collateralized.” CFTC Chairman Gensler argues, “Bank capital regulation should be modified to allow only credit-default swaps that are subject to collateral requirements if they're being used for a bank's capital-relief purposes.” There is widespread consensus amongst experts and insiders that financial institutions should be subject to higher capital requirements to cushion them from unexpected losses. The esteemed Professor Eugene Fama, known by many as “the father of modern finance,” believes that “substantial increases in the required capital of financial firm” along with “laws to enforce transparency” are the only “workable” solutions to the “too big to fail” problem. As default rates skyrocketed, firms like AIG were not sufficiently liquid enough to meet their collateral requirements—ratcheting up systemic risk in the process. Unlike the futures markets in which “a seller…has to update his collateral position daily, which protects the buyer against the risk of the seller’s default,” the absence of regulation in the CDS market allows firms like AIG “to sell

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300 Nicole Gelinas, “Too Big Not To Fail,” National Affairs, Number 2, Winter 2010 at 33 (quoting, “The government must re-impose clear, well-defined limits on activities such as borrowing for speculation. Financial firm should not be able to make hundreds of billions of dollars in promises with negligible cash down, as the insurance giant American International Group did through unregulated financial instruments called credit-default swaps.”)


303 Alan Murray, “Fixing Global Finance,” Wall Street Journal, December 14, 2009 at R1 (quoting, “The Wall Street Journal…gathered top financiers at a lodge south of London for its second Future of Finance Initiative. The group…deliberated on the most important steps moving forward…At the top of their list was a call for increasing the capital that financial institutions must hold, with higher requirements for institutions posing greater risks to the system”); Robert M. Solow, “Hedging America,” The New Republic, December 30, 2009 at 40, (quoting, “Leverage is good for you [i.e., profitable], until it isn’t. It is not so good for the system.”); Nicole Gelinas, “Too Big Not To Fail,” National Affairs, Number 2, Winter 2010 at 33.

enormous amounts of ‘insurance’ without posting the proper collateral.”

Imposing greater margin requirements in OTC derivatives markets will help to restore confidence by and between counterparties. A one-size-fits-all capital requirement for all financial institutions large and small would be inappropriate. Capital requirements should be based on the systemic importance of the institution. This is not to disadvantage large financial institutions. To the contrary, given that these institutions “have an implicit, or explicit, federal guarantee on their debt that lowers their cost of capital,” higher capital requirements level the playing field—“financial institutions whose systemic importance requires national authorities to underwrite them if they fail should be required to hold more capital. Imposing greater margin requirements on larger systemically important institutions may help to restrict the size of these institutions. This would help to ensure that firms can be allowed to fail without jeopardizing the overall safety and soundness of the financial system.”

With respect to individual financial institutions, the same capital requirements should be applied to all of their investments to prevent firms from “[gaming] the system by structuring some securities to avoid robust capital requirements.”

iii. **International Cooperation and Coordination**

In light of the “gigantic international flows of money” that criss-cross the globe daily, it is now possible for banks in Europe and Asia to “imperil” financial institutions in the

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306 Alan Murray, “Getting Started,” Wall Street Journal, December 14, 2009 at R4 (quoting Sir Howard Davies, “There is a case for using capital requirements in order to increase the safety the larger the institution becomes. Now, that may actually restrict the size of institutions; it may mean that some institutions do not merge, or break up. Personally, I think that would not be a bad thing.”)

U.S. and vice versa. Newsweek and Washington Post contributor, Robert J. Samuelson, writes, “Regulation is harder, because the geography of finance is more intricate and more global.” A successful effort to regulate credit derivatives requires coordination with other countries so as to avoid “regulatory arbitrage”—a situation in which market participants simply “pick and choose” markets to trade in based upon which trading laws are most lax. As the majority of credit derivatives trading occurs in London (the U.S. market share in 2007 amounted for only 24% of the global trade), Anglo-American regulatory cohesion is vitally important. Richard Gnodde, Co-Chief Executive of Goldman Sachs International, declared, “Markets are global and, for markets to stay global, there [needs] to be some global regulation…[and countries] must avoid financial protectionism.” CFTC Chairman Gensler remarked regarding the process of international coordination, “‘We are to a surprising extent working well with international regulators…I’m optimistic we’ll end up at roughly the same spot.’”

Given the global nature of derivatives markets, financial regulatory reform in the U.S. needs to “harmonized with the substantive rules and compliance procedures governing

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309 Id. at 43.
310 “A Call To Action,” The Wall Street Journal, December 14, 2009, at R2 (quoting, “To make global cooperation feasible and promote a level playing field, regulations should be of an achievable scope. Financial activities of similar substance and economic reality should be regulated in the same way from country to country.”)
313 Lynton Jones, Id.
Effective international regulatory coordination will prevent a “race to the bottom” in which OTC derivatives markets move to places where regulations are most lenient or non-existent.

**Conclusion**

The Great Panic brought about “a cascade of market calamities that seemed almost designed to confirm the worst clichés about free enterprise.” Today, “in this new era, banking, insurance and trading are regarded as much as potential contagions as essential economic activities.” At the height of the crisis, Paul Volcker, former Chairman of the Federal Reserve, declared, “The pervasive and deep-rooted financial crisis has amply demonstrated that our financial system is broken and it requires thorough-going repair.” Nicole Gelinas, a senior fellow at the Manhattan Institute, writes:

> The financial world operated ever more freely under a long-running illusion that elegant modern theories and technologies made the creation of nearly all manner of credit—lending to corporation and consumers alike—perfectly safe. Yet with each new innovation, financiers left themselves even less room for error should the tiniest thing go wrong (just as they had in the ‘20s [leading up to the Great Depression]. They also left themselves increasingly reliant on the ultimate guarantee (and market distortion): government rescue…They hadn’t created safety out of danger, but danger out of safety, eventually turning the most sober investment that many people make—the purchase of a home—into a risky bet.

William D. Cohan writes “What is clearer than ever…is that the ongoing failure to monitor the trading of derivatives on a formal exchange — as most stocks and bonds are — was one of the major, albeit least understood, factors contributing to today’s economic

318 Dennis K. Berman, *Id.*
320 “Too Big Not To Fail,” National Affairs, Number 2, Winter 2010 at 28.
mess.” Only in hindsight did it become abundantly clear that deregulation had allowed “explosive growth [to occur] in precisely those [financial markets] which were unregulated or under-regulated.” A Washington-insider close to Senate Banking Chairman, Chris Dodd, remarked, “These guys [Wall Street Banks] were given a book of matches, and they almost burned down the city.”

Voicing his dissatisfaction of the status quo, CFTC Chairman Gensler declared, “I disagree with anyone who says derivatives did not play a part in the crisis,” adding “Like San Francisco after the earthquake, we had a calamity, and now we need building codes.” Senator Chris Dodd, chairman of the Senate Committee on Banking, Housing and Urban Affairs, acknowledges, “The regulatory structure we have today was destined to fail. It was assembled piece by piece, over decades, in reaction to whatever the most recent crisis seemed to demand. The result was a hodgepodge structure ill-equipped to safeguard our economy in an era of significant innovation in the financial sector.”

Without “rational regulation,” financial institutions “will eventually destroy themselves, and damage everything around them.”

George Soros, “one of the world’s most

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323 David Rogers, “Senate Insider Seeks to Retire as a Reformer,” Politico, April 19, 2010 at 12.
powerful financial traders”\textsuperscript{327} and persistent critic of deregulation argues that the decision by regulators to excuse themselves from overseeing financial institutions to be a “most shocking abdication of responsibility:”

If [regulators] could not calculate the risk, they should not have allowed the institutions under their supervision to undertake them. The risk models of the banks were based on the assumption that the system is stable. But, contrary to market fundamentalist beliefs, the stability of financial markets is not assured; it has to be actively maintained by the authorities. By relying on the risk calculations of the market participants, the regulators pulled up the anchor and unleashed a period of uncontrolled credit expansion.\textsuperscript{328}

Reflecting on Adam Smith’s vision of capitalism, Yuval Levin implores, “It is crucial to see that self-command and discipline, not freedom, lay at the height of Smith’s case for capitalism.” Capitalism does not mean freedom from regulation but rather freedom from “undue influence of some competitors or their political patrons.”\textsuperscript{329} Effective financial regulation helps to control the direction of appetite [as opposed to the] unleashing of appetites.”\textsuperscript{330} In a speech at the Cooper Union in New York in April of 2010, urging financial regulatory reform, President Obama echoing Adam Smith declared, “The free market was never meant to be a free license to take whatever you can get, however you can get it.”\textsuperscript{331}

Smith, the father of capitalism, wrote in the 18\textsuperscript{th} Century, “The market is a public institution that requires rules imposed upon it by legislators who understand its workings and its benefits.”\textsuperscript{332} Over the past thirty years, this particular insight of Smith’s seems to

\textsuperscript{327} Edmund Conway, “George Soros: Credit crisis is the worst since the Great Depression,” Telegraph UK, May 21, 2008, \url{http://www.telegraph.co.uk/finance/markets/2790341/George-Soros-Credit-crisis-is-the-worst-since-the-Great-Depression.html}.
\textsuperscript{329} Yuval Levin, “Recovering the Case for Capitalism,” National Affairs, Volume 3, Spring 2010 at 127.
\textsuperscript{330} Yuval Levin \textit{Id}. at 128.
\textsuperscript{332} Yuval Levin, \textit{Id}. at 125.
have been lost. The so-called “Reagan Revolution” introduced free-market ideologies that until the election of Barack Obama had been championed by every Democratic and Republican administration since.\footnote{Matthew Dallek, “Not Ready for Mt. Rushmore: Reconciling the myth of Ronald Reagan with the reality,” The American Scholar, Summer 2009, (quoting, “Reagan pioneered supply-side economics and was the first president since the New Deal to put in place a thoroughgoing hands-off, deregulatory philosophy.”); James B. Stewart, “Eight Days,” The New Yorker, September 21, 2009 at 81 (quoting, “At least since the Reagan revolution of the early nineteen-eighties, free-market ideology has been ascendant, with even Democratic Administrations following its precepts of market discipline, limited regulation, and unfettered rewards.”)} Unfortunately, self regulation failed as a means of controlling risk. On Wall Street, huge profits and corresponding bonuses during the Super Bull Market inhibited their appreciation of risk. University of Texas law professor, Henry T. C. Hu, writes “Because of compensation structure, cognitive bias, human capital, ‘inappropriability,’ and other factors characteristic of that innovation process, ‘sophisticated’ financial institutions can misunderstand—or act as if they misunderstand—the risks of derivatives and other complex financial products.”\footnote{Hu, “Misunderstood Derivatives: The Causes of Informational Failure and the Promise of Regulatory Instrumentalism,” 102 Yale Law Journal 1457 (1993)} In OTC derivatives markets, the lack of transparency virtually ensured that Congress and regulators would have little understanding of how these markets operated. Illiquidity and a lack of information led to the near failure of capitalism and inflicted misery on millions all over the world.\footnote{George Soros, “Do Not Ignore The Need For Financial Reform,” Financial Times, December 15, 2009, at 2 (quoting, “The crash of 2008 was caused by the collapse of a super-bubble that had been growing since the 1980’s. This was composed of smaller bubbles. Each time a financial crisis occurred the authorities intervened, took care of the failing institutions, and applied monetary and fiscal stimulus, inflating the super-bubble even further”); David M. Smick, “A Never-Ending Economic Crisis?” Commentary, January 2010, at 29 (quoting, “In the 12 months following the outbreak of the crisis, global trade declined by 25 percent, global investment by 15 percent, and global GDP by nearly $4 trillion, or an amazing 6 percent. Global industrial production in the advanced economies dropped a whopping 15 percent. Worldwide unemployment rates have skyrocketed, nearly doubling in the United States alone.”)} As a regulatory model, self regulation proved to be woefully incapable of containing systemic risk during a time of severe financial distress.\footnote{Janet Morrissey, “Credit Default Swaps: the Next Crisis?” Time, March 17, 2008, \url{http://www.time.com/time/business/article/0,8599,1723152,00.html}; Also See, Edmund Conway, “George Soros: Credit crisis is the worst since the Great Depression,” Telegraph UK, May 21, 2008,}
The Great Panic demonstrates clearly that the public interest is not served by allowing mortgage backed securities and credit default swaps CDSs to remain unregulated. Financial institutions that had made huge leveraged bets on mortgage-backed securities lost billions. This loss was compounded by the skyrocketing cost of insuring their debt. Firms like Bear Stearns and Lehman Brothers could no longer afford to borrow. It was the death knell of investment banking or for any other institution dependent on access to credit. In the end, the financial innovations in mortgage and credit markets that had created the real estate bubble would wreak havoc on Wall Street and on Main Street.\[^{337}\]

The complexity of credit derivatives and collateralized debt obligations was such that no one, executives and board members in particular, was quite sure what would happen or who would fall next.\[^{338}\] The markets that had been so profitable would be their undoing.\[^{339}\]

Though the Great Panic was exacerbated by complex financial instruments, some still argue that “financial innovation [remains] central to growth and critical to a speedy


\[^{338}\] Andrew Ross Sorkin, *Too Big To Fail*, Viking, 2009 at 122 (quoting, “As both [Lehman Chief Operating Officer and President, Joseph] Gregory and [Lehman Chief Executive Officer, Richard] Fuld were fixed-income [i.e. bond] traders at heart, they weren’t entirely up to speed on how dramatically that world had changed since the 1980s...Banks were creating increasingly complex products many levels removed from the underlying asset. This entailed a much greater degree of risk, a reality that neither totally grasped and showed remarkably little interest in learning more about.”);

[economic] recovery.” The ability of the U.S. economy to process failure and “[latch] on to new innovations and building them to scale quickly and profitably” is not commonly found abroad. Richard Florida, a sociologist, writes “We are the most adaptive, inventive nation, and have proven quite resilient.” The principles contemplated in Part III of this essay help to foster financial innovation without ratcheting up systemic risk. Socially useful innovation should be encouraged, but innovation should never impede the greater purpose of banks, insurance companies and securities markets, which is ”to allocate society’s pool of accumulated savings, its capital, to the most productive available uses.” Like any regulation, “the cost of regulation must be balanced against the benefits.” Finding the appropriate balance between government-controlled and completely unregulated is no small task. Robert M. Solow poses the following question: “How [do we] protect the economy and society against specified tendencies to market failure without losing much of either the capacity of a market system to coordinate economic activity efficiently or its ability to stimulate and reward technological and other innovations that lead to economic progress?”

342 “A Call To Action,” Id. at R2.
343 Robert M. Solow, “Hedging America,” The New Republic, December 30, 2009 at 38-39 (quoting, “The informational requirements for the validity of the Invisible Hand [Adam Smith’s free-market] Theorem are considerable….Another requirement is the absence of significant external effects or ‘externalities’…Externalities are ubiquitous in a densely populated modern economy. Some taxes and subsidies, instead of being distortions, are designed to correct such distortions that arise from such externalities,…and many regulations are intended to prevent or minimize externalities…Faced with this list of obstacles, one might be tempted to give up on the market economy altogether. That would be as much of a mistake as the one made by doctrinaire free marketers. The real point is that the choice is not either/or, but when and how much. Many distortions, imperfections, and externalities are small. To try to correct them all would be intolerably bureaucratic. The large ones cannot be wished away or ignored for reasons of piety; they cause large inefficiencies.”)
In all likelihood, financial crises will arise in the future given that “the financial system is so genuinely complex and so many of the relationships within it are non-linear, even chaotic.”345 While there is no perfect regulatory scheme for avoiding future financial panics on the scale of Great Panics, this should not suggest that more financial reforms are useless. There is value in regulatory reform that looks back, using hindsight to prevent financial institutions in the future from repeating the same mistakes, misdeeds and absences of judgment over the past decade that led to the Great Panic. There is a lesson to be learned from that destabilizing financial crisis, irrespective of where the Dow Jones Industrial average sits today.346 Thoughtful regulation, primarily focused on promoting the safety and soundness of financial institutions, should be aimed at avoiding crises of the magnitude experienced during the Great Panic—an outcome no government, investor or business wants to experience again.

Henry David Thoreau once wrote, “If you have built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them.”347 Congress has lived up to its responsibility to put the regulatory foundations under the OTC derivatives markets. Nevertheless, drafting public policy that prevents all financial crises from happening again is perhaps asking the impossible. Yet in the absence of political will for another wide scale bailout of financial institutions, another financial crisis on the scale of the Great Panic could spell certain doom for Wall Street firms and create chaos on Main Street and around the world. To borrow a phrase from President Obama, the Great Panic provides us with a “teachable moment.” And what have we

346 The Dow Jones Industrial Average as of December 29, 2009 is 10,580.33, an increase of 23.64% over the 52-week period.
learned is this: deregulation on Wall Street failed. Short-term profit-taking in combination with ineffective management enabled abuses in MBS and over-the-counter credit derivatives markets to spread financial contagion throughout the United States and around the world. With the Dodd-Frank Act now the law of the land, the effectiveness of regulatory oversight will depend upon its implementation. In Washington as on Wall Street, the devil lies in the details.

THE END