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Wall Street Meets Main Street: Understanding the Financial Crisis

Eamonn K. Moran

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WALL STREET MEETS MAIN STREET:
UNDERSTANDING THE FINANCIAL CRISIS

EAMONN K. MORAN*

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I. INTRODUCTION

We are at an extraordinary and perilous moment in our nation's history as we struggle through a financial crisis that former Treasury Secretary Henry M. Paulson Jr. has called "a once or twice in a hundred year event." The financial markets in the United States have been in serious turmoil and upheaval since the summer of 2007, and this extraordinary period of financial turbulence is now well into its second year. The current financial crisis is illustrated by the strained condition of financial markets and the dramatic and prolonged slowdown of the broader economy. At the close of 2008, Wall Street finished its worst year since 1931, and the housing market finished its worst year in recorded history. Perhaps as a sign of the confusion and complexity of these times, no one seems to know quite what to call this particular crisis that we find ourselves in. Is it a "financial crisis?" A "credit crunch?" The "Wall Street crisis?" The "Great Intervention?" Or, better yet, the "global meltdown?" Nonetheless, even while each of us might label this consequential period by different terms, there is one thing that we can all agree on: the current financial crisis is likely to be judged in retrospect as the most wrenching and challenging since the end of the Second World War.

The proximate cause of the financial turmoil was the steep increase and subsequent sharp decline of housing prices nationwide in recent years, which, together with poor lending practices, led to large losses on mortgages and mortgage-related instruments at a wide range of financial institutions. As long as housing prices kept climbing, fueled by ever-increasing levels of debt and leveraging, these problems remained hidden. But in 2006, when prices peaked and began to fall, things started to unravel and come undone, and the "emperor" was found to have no clothes. After years of unsustainable housing price

appreciation and imprudent lending practices, a housing correction—the bursting of the bubble—was both inevitable and necessary. This financial crisis, marked by a plethora of home foreclosures and illiquid mortgage-related assets which have created a capital hole on the balance sheets of banks and financial institutions, has spilled over into the greater economy, causing a global credit crunch and fueling a deep, long, and painful recession.

It is helpful to remember that we are not only in an economic recession, but in a serious banking crisis as well. The reckless lending practices and irresponsible risk-taking conducted by many of our financial institutions during this era of deregulation have proven quite costly for the U.S. economy and its taxpayers. We have already seen and continue to see on a daily basis the financial crisis' devastating effects on homeowners with higher mortgage default and foreclosure rates affecting individuals and neighborhoods. And, since the first signs of financial trouble appeared, we have seen the continuing impact on financial institutions, asset classes, markets, and a financial system that is integral to the everyday lives of all Americans. As hundreds of billions of dollars in mortgage-related investments went sour, mighty investment banks that once ruled Wall Street and formed the foundation of our financial markets have shrunk, dissolved, or reinvented themselves as bank holding companies by converting their nonbank bank affiliates into traditional commercial banks while thousands of white-collar jobs have been eliminated. The financial crisis has felled some of the most storied financial institutions such as Bear Stearns and Lehman Brothers; brought Merrill Lynch, Wachovia, A.I.G., Citigroup, Fannie Mae, and Freddie Mac to their knees; prompted the failures of large savings and loan companies Washington Mutual (WaMu), which was taken over by JPMorgan, and IndyMac Bank; and eliminated the


final two large independent investment banks – Morgan Stanley and Goldman Sachs. As three financial giants, Citigroup, Merrill Lynch, and Wachovia, reported multibillion dollar losses in the fall of 2008, the finance industry recognized that all of the combined profits that major banks earned from early 2004 until the middle of 2007 – some $305 billion - have disappeared.\(^5\) Between July 2007, when the credit crisis began, and mid-October 2008, the country’s nine largest banks and financial institutions marked down their valuations on loans and other troubled assets by a combined $323 billion.\(^6\) This statistic was released before Wachovia’s $23.9 billion write-down on October 22, 2008 - the largest ever for a bank and, coming on top of $10 billion of losses earlier this year, wipes out nearly all of the profits the firm earned since the merger of First Union and Wachovia formed the new Wachovia in 2001.\(^7\) Goldman Sachs, coveted and respected for avoiding much of the fallout that had severely shaken its Wall Street rivals and a seemingly formidable institution on many fronts, reported a net loss of $2.12 billion for its quarter ended November 28, 2008—its first quarterly loss since it went public in 1999—as it also faced substantial write-downs on distressed assets ranging from private equity to commercial real estate.\(^8\) Goldman Sachs’ closest rival—Morgan Stanley—was fortunate to avoid losses in the prior three quarters of 2008 but incurred a $2.37 billion fiscal fourth-quarter loss caused by asset write-downs and losses on its bond business due to the financial crisis, although it still managed to report a full-year profit of $1.59 billion.\(^9\)

Uncertainty and a lack of confidence have clogged our basic financial plumbing as the channels of credit – the arteries of

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6. *Id.*
the global financial system — have constricted. When banks cannot
finance at reasonable levels and cannot or are not willing to lend,
everyone who depends on credit suffers. Rippling effects from a
worsening economy have trickled down from Wall Street into
Main Street as the capital markets—the pipes through which
money flows to finance student loans, car loans, home loans,
family needs, and small businesses’ payroll and inventory — fell
victim to the credit freeze. These drastic events have reverberated
far beyond the trading floors of Wall Street and board rooms of
corporate America, as almost no industry has been spared as the
crisis that first emerged in the subprime mortgage market
metastasized. The stock market plummeted. The credit markets
froze. Hundreds of billions of dollars that Americans invested in
retirement accounts, stocks, and mutual funds have evaporated.
All told, about $7 trillion of shareholders’ wealth — the gains of
the last six years — was wiped out in a year of incredibly turbulent
market swings. Homeowners are watching as the value of their
homes plummet and housing foreclosures skyrocket. Families
worry about how they will afford basic commodities such as
groceries and gasoline. Unemployment is rising. Consumer
spending is weakening. Manufacturers are cutting production.
Interest rates on corporate bonds — which reflect investor fears of
default — are soaring, which will almost inevitably cause sharp
declines in business spending. Two of the nation’s three largest
automobile manufacturers — Chrysler and General Motors — each
received an emergency bailout to provide liquidity and/or prevent
imminent bankruptcy, giving them a few months to restructure and
stabilize their businesses. Many colleges and universities are
announcing hiring freezes, postponing construction projects,
increasing tuition, or putting off planned capital campaigns. A
global recession is underway. There surely are more economic
shocks in store, including increased unemployment, more
corporate defaults, and state and local government budget
emergencies. The quintessential image of this crisis might very
well be, on the one hand, the many families gathering around their
kitchen tables each night asking how they will weather this storm
and, on the other hand, the many individuals, ranging from young
professionals to retirees, who lie awake late into the night
worrying about how they will even survive this turbulent financial storm.

In the last year, the federal government has pledged trillions of dollars to help resolve the financial crisis, including $1.7 trillion in loans to companies that use hard-to-sell securities as collateral, $3 trillion in government purchases of stock, corporate debt, and mortgages, and $3.1 trillion in government guarantees of corporate bonds, money market funds, and money in some deposit accounts. The government’s assumption of $7.8 trillion in direct and indirect obligations amounts to almost half the size of the entire national economy and far surpasses the controversial $700 billion financial rescue package (bailout bill) passed by Congress in early October 2008.

This tumultuous combination amounts to what Richard Berner, the co-head of global economics at Morgan Stanley, calls a “perfect storm” for U.S. households. Alan Blinder, a professor of economics at Princeton University and former vice chairman of the Federal Reserve, believes that the economy “has fallen off a cliff,” while John Thain, chairman and chief executive of Merrill Lynch until its merger with Bank of America at year-end 2008, has stated that the global economic slowdown is not like the most recent slowdowns seen in 2001, 1998, or 1987, but is, rather, quite comparable to the period after the debilitating 1929 stock market crash known as the Great Depression. The National Bureau of Economic Research, a prestigious and widely cited U.S. independent economic authority, pronounced before the close of 2008 that the nation has been in a recession since December 2007. Newly elected President Barack Obama has sounded resigned to inheriting a starkly troubled and reeling economy. Perhaps the

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11. Id.
15. Barack Obama, President of the U.S., *Victory Speech at Grant Park,*
most dangerous consequence of this economic crisis is that our collective confidence in our nation's future, the economy's resilience, our productivity and entrepreneurial spirit, and our ability to achieve the widely sought after American dream has been badly shaken and tarnished to a significant degree.

Entrenched problems of financial excess and overextension had developed over the past decade, and many share responsibility: overextended homeowners, unduly aggressive mortgage lenders, financial engineers who created new financial technologies, and banking and finance executives who, along with government regulators, grossly underestimated the risks to the financial markets. What is the nature of the crisis? Who or what caused this mess? The details can be incredibly complex, but the basics are pretty simple. As noted in a recent edition of Newsweek: "[W]ho could have predicted that giving out loans like Halloween candy to people with mini-salaries to buy mini-mansions— who then used their home equity to buy gas-guzzling Hummers—would ever backfire?"

This article seeks to provide a practical and comprehensive understanding of the financial crisis—how we ever got to this point—as well as a sense of how this financial crisis, unprecedented in its scale, monetary value, complexity, and the speed with which it has happened, became not just a Wall Street phenomenon, but one with painful and widespread ramifications for ordinary Americans. Part II of this article discusses the origins of the credit crisis and traces the genesis of the housing bubble, the emergence and prominence of subprime lending, and the advocacy of increased homeownership as a social and political goal. Part III sets forth the development of financial engineering and the growth of complex financial instruments and technologies on Wall

18. See infra Part II and accompanying text.
Street that contributed to the financial crisis through the process of securitization. Part IV of the article discusses the “originate-to-distribute” securitization model and the critical incentives securitization inherently creates to underestimate risk. Part V chronicles how the housing crisis morphed into a banking crisis and discusses the fallout that financial markets and financial institutions have witnessed first-hand since the middle of 2007. Part VI provides a synopsis of the development of the Emergency Economic Stabilization Act of 2008 (EESA), popularly referred to as the “bailout bill,” and the mechanisms the federal government has used and is in the process of using in order to counteract the forces of this recession. Finally, Part VII discusses several broader themes aimed at first achieving economic recovery and stability and restoring badly needed confidence and, second, repairing the greater financial system.

II. THE ORIGINS OF THE CREDIT CRISIS

A. Federal Reserve Interest Rate Reductions

The roots of the credit crisis stretch back to another notable boom-and-bust in recent history: the tech bubble of the late 1990s. In 1998, turmoil was rampant in the financial markets. The spectacular failure of Long-Term Capital Management (LTCM), a United States hedge fund, in the late 1990s led to a massive bailout by other major banks and investment houses and helped persuade the Federal Reserve to provide three quick interest rate cuts that contributed to the dot-com bubble. When the stock market began a steep decline in 2000 and the nation slipped into a recession the next year, the Federal Reserve, once again, sharply lowered interest rates to diminish the blow of the collapse of the dot-com bubble and combat the risk of deflation. From 2000 to 2003, the Federal Reserve lowered the federal funds rate target—the interest rate at which depository institutions lend
balances to each other overnight—from 6.5% to 1.0%. In the aftermath of the tragic September 11, 2001, terrorist attacks, the Federal Reserve cut the federal funds rate in half, to 1.75%, and this rate remained below 2.0% for almost three years.

This series of actions by the Federal Reserve to lower interest rates and hold them at historically low levels for three years partially fueled the housing bubble and eventual crash that triggered the subprime mortgage quagmire and current financial crisis. The Federal Reserve believed that interest rates could be lowered safely primarily because the risk of inflation was perceived as low. Richard W. Fisher, president and chief executive officer of the Federal Reserve Bank of Dallas, however, stated that the Federal Reserve's interest rate policy during this time period was misguided by erroneously low inflation data and thereby contributed to the housing bubble. These low nominal rates, negative in real inflation adjusted terms, sparked a building and buying boom in housing that developed into a huge speculative bubble. Lower interest rates made mortgage payments cheaper, caused increased demand for homes, sent home prices skyward, and encouraged investors to pour money into the U.S. mortgage market. In addition, millions of homeowners took advantage of the rate drop to refinance their existing mortgages. Yet, while the industry flourished and the quantity of mortgages rose, the quality of the mortgages went down. When the Federal Reserve brought rates back to 5.25% at the end of June 2006, the bubble began to deflate; the housing correction that evolved into a financial crisis began about one year later.


A study conducted by Stanford University Professor John B. Taylor suggests that the federal government could have avoided a large portion of the turmoil associated with the financial crisis if the Federal Reserve had not "cut rates so deeply and . . . raised them back up more quickly."27 Taylor's simulated study increased interest rates more quickly than the Federal Reserve and resulted in a smaller increase in new homes than what actually occurred in recent years. These results illustrate that raising interest rates sooner would have helped prevent the housing bubble and sharp fall in the housing market, and, thereby, much of the current financial crisis.

B. The Nature of the Lender – Borrower Relationship

As incomes rose due to the expansion of the American economy, homeowners and lenders sought out one another in ever increasing numbers since private homeownership is greatly desired by most who can afford it. A substantial factor bolstering the subprime mortgage crisis stems from the intrinsic nature of lending. Lenders and borrowers typically engage in arms-length business transactions where each side strives to advance its own interests since the creditor-borrower relationship does not generally constitute a fiduciary relationship requiring lenders to safeguard the borrowers' interests.28 In fact, in the loan underwriting process, lenders generally have no duty to refrain from making a loan if they arguably should know that the

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borrowers cannot repay the loan. This is in large part because a mortgage loan is recognized as "a business transaction where each party seeks its own economic interest, rather than a relationship of trust and confidence." While a lender has "no judicially imposed duty to ensure a [borrower's] ability to repay the loan," most lenders, prior to the subprime mortgage boom, refused to make a loan in which the borrower's ability to repay was doubtful.

C. Overextended Homeowners

The events leading us to this point began many years ago, starting with lax and imprudent lending practices by banks and financial institutions, and furthered by borrowers buying houses they could not afford and taking out mortgages they could not pay. In evaluating whether a particular borrower qualifies for a mortgage loan, mortgage lenders typically look at a variety of factors, including ability and willingness to repay the loan. Since the real estate boom sparked excessive demand and drove up housing prices, lenders lowered and weakened their underwriting standards and crafted creative loans to provide money to high-risk borrowers in order to purchase more expensive homes. As


33. See Hearing, supra note 4 (testimony of Henry M. Paulson, Jr., Sec'y, U.S. Dep't of the Treasury) (noting that the root cause of the financial crisis was the collapse of the housing market in late 2006 and early 2007, triggered by "bad lending practices").

housing prices inched higher, home buyers, betting on continued house price appreciation, took out sizeable loans with little or no documentation, no down payment, or without the income to qualify for a conventional loan of the size they wanted. Coupled with an increase in loan incentives such as easy initial terms like no money down or no or low payments for two years, these market trends encouraged borrowers to become overextended and assume costly and difficult mortgages in the belief that they would be able to quickly refinance at more favorable terms. Total mortgage origination volume, which historically amounted to approximately $1 trillion a year, reached its peak at almost $4 trillion in 2003 when, due to “unprecedented rate cuts, homeowners refinanced, took cash out of their home equity, and speculated that housing prices would continue to rise indefinitely.”

As home prices began to appreciate, even prime borrowers became more willing to assume risk to purchase homes. Nontraditional financing, including mortgage commitments such as adjustable-rate mortgages (ARMs) and interest-only mortgages which vary from the traditional thirty-year, fixed-rate mortgage, allowed buyers to qualify for homes they otherwise could not afford under traditional fixed-rate mortgage lending guidelines.

Yet while it might seem elementary, housing prices do not always increase, interest rates do not always drop, borrowers cannot always refinance whenever they choose, and housing can be lost due simply to mortgage default. One unfortunate consequence of the inflation of the housing market was that mortgage brokers came to view their loans as well-secured by the rising values of their real estate collateral and, therefore, failed to focus sufficiently on borrowers’ ability to repay. Millions of

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35. See Jo Carrillo, Dangerous Loans: Consumer Challenges to Adjustable Rate Mortgages, 5 BERKELEY BUS. L.J. 1, 27 (2008).
36. Hirsch, supra note 28, at 44.
homeowners took advantage of the interest rate drops to refinance their existing mortgages, but once interest rates began to rise and housing prices started to drop moderately in many parts of the United States in late 2006 and early 2007, refinancing became more difficult. When housing price appreciation began to slow, the consequences of weak underwriting, including little or no documentation and zero or minimal required down payments, became obvious. Some homeowners unable to refinance began to default as their mortgage loans reset to higher interest rates and payments or the amount of the loan exceeded the new lower market value of the home.

For most households in the United States, "home equity – a function of forced savings in fixed-rate mortgages plus long-term real property appreciation" – has been the most substantial source of wealth. This makes homeownership an efficient and effective way to develop wealth as home equity remains the primary savings mechanism for a substantial percentage of the U.S. population. Nontraditional financing also provided a windfall to existing homeowners, which lenders capitalized on through the encouragement of home equity withdrawals. Individuals and families accessed and used this new source of credit to tap previously illiquid home equity wealth through refinancing.


38. See Raymond H. Brescia, Capital in Chaos: The Subprime Mortgage Crisis and the Social Capital Response, 56 CLEV. ST. L. REV. 271, 295-96 (2008) (finding that homeowners were able to refinance their mortgages with unfavorable terms thanks to the increased equity they enjoyed with rising home prices); see also U.S. Gov't Accountability Office, Briefing to the H.R. Comm. on Fin. Servs., Subject: Information on Recent Default and Foreclosure Trends for Home Mortgages and Associated Economic and Market Developments 4 (2007), available at http://www.gao.gov/new.items/d0878r.pdf (finding that the decline in housing prices across the nation may have provided disincentives to borrowers to keep paying their mortgages while making it more difficult to refinance or sell so as to avoid default or foreclosure).


Furthermore, a huge real estate speculative bubble in housing prices caused millions of Americans to think of homes as a cash investment instead of as a place to live. During 2005 and 2006, nearly forty percent of homes purchased were not used as primary residences, but were instead used for investment purposes or as vacation homes.41

This time period – the housing bubble – naturally saw substantial increases in both homeownership and home values. Homeownership rose to 67.4% of U.S. households in 2000 from 64% in 1994,42 and peaked in 2004 with an all-time high of about 69%.43 Simply, the American dream seemed to be thriving. There are two sides to every coin, however. While an admirable social goal and a plus for the economy,44 increased homeownership has come at a very substantial personal and financial cost to already financially strapped consumers as it allowed too many individuals and families to become overextended and hold mortgages they simply could not afford. While the housing boom increased the asset value of U.S. households, it also decreased personal savings, with home equity loans replacing savings and personal investments.45 Robert Shiller, a Yale University economist, has


44. See Jacoby, supra note 39, at 2262 (noting that homeownership develops household wealth and economic self-sufficiency, generates positive social-psychological states, and promotes stable communities); Prentiss Cox, Foreclosure Reform Amid Mortgage Lending Turnoilo: A Public Purpose Approach, 45 HOUS. L. REV. 683, 723-24 (2008); Aaron Unterman, Exporting Risk: Global Implications of the Securitization of U.S. Housing Debt, 4 HASTINGS BUS. L.J. 77, 92-93 (2008) (noting that a strong housing market can foster increased support for the sitting government and provide greater national wealth and increased domestic consumption); see also Cassandra Jones Havard, “Goin’ Round in Circles” . . . and Letting the Bad Loans Win: When Subprime Lending Fails Borrowers: The Need for Uniform Broker Regulation, 86 NEB. L. REV. 737, 754-55 (2008) (noting that homeownership provides access to quality education and promotes job stability, is a path to wealth and asset accumulation for families, stabilizes neighborhoods, and represents an investment in local economies and, thereby, fosters economic growth.).

45. See Unterman, supra note 44, at 93.
analyzed home price appreciation since 1890 and concluded that homes in the early 2000s were severely “overvalued at unprecedented levels.”

Between 1997 and 2006, American home prices increased by 124%. Although home prices nationwide experienced rapid price appreciation, increases were “especially pronounced” in a few regions such as California, Florida, Arizona, and Nevada, where house prices more than doubled just between 2000 and 2006. Yet, even given these skyward statistics, the housing market in the United States was not the most overheated. In the same period—between 1997 and 2006—prices in Great Britain went up by 194%, those in Spain by 180%, and those in Ireland by 253%.

D. The Rise of Subprime Lending – The Essentials

What was peculiar to the United States was the sudden rise of “subprime” lending. Today’s home mortgage market is divisible into “prime” and “subprime” segments. The prime segment generally caters to the most creditworthy borrowers. Subprime lending, on the other hand, is geared towards a greater number of higher-risk borrowers who do not qualify for market interest rates owing to various risk factors, such as income level, size of the down payment made, credit history, and employment status. The genesis of subprime lending can be traced to several

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47. CSI: credit crunch, supra note 25.


49. CSI: credit crunch, supra note 19.

key federal laws enacted during recent decades. In 1980, Congress enacted the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA), which preempted state usury ceilings for the majority of home mortgage loans. Enacted during a period of record-high interest rates, in part to foster lending to borrowers in states with low usury ceilings, DIDMCA’s deregulatory principles both condoned increased conventional mortgage interest rates in states with low usury ceilings and encouraged the growth of the subprime market by overriding limits on high interest rate mortgage loans. Furthermore, in 1982, Congress enacted the Alternative Mortgage Transaction Parity Act of 1982 (AMTPA), which spurred increased flexibility in the mortgage lending industry by allowing lenders to offer adjustable rate mortgages as part of their business transactions.

The subprime mortgage loan is a fairly recent “product niche in the mortgage lending industry” that achieved prominence as a financing vehicle during the course of the past decade. While the housing market was still robust, lenders argued that innovative and exotic lending vehicles would widen consumer access to credit, which did in fact occur. As the mortgage industry also underwent substantial changes, aggressive lenders sprung up to serve

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52. Usury regulation refers to the amount of interest a lender may charge a borrower. See LISSA L. BROOME & JERRY W. MARKHAM, REGULATION OF BANK FINANCIAL SERVICE ACTIVITIES 344 (3d ed. 2008).


56. Johnston et al., supra note 50, at 125.

57. Carrillo, supra note 35, at 3.
subprime borrowers; Countrywide, for instance, established a subprime unit in 1996.58 Banks and other lenders funded these loans with little regard for the borrower’s credit history. “Underwriting standards for mortgages weakened as more and more reliance was placed on the value of the collateral (the home) rather than the willingness and ability of the borrower to repay the loan out of income.”59 Easy credit, coupled with the assumption that housing prices would continue to appreciate, created an increase in homeownership rates and the demand for housing while encouraging many subprime borrowers to obtain adjustable-rate mortgages (ARMs) which they could not afford after the initial incentive period when the mortgage interest rate reset to a higher, market-based rate.60 The majority of subprime loans are ARMs.61 For home buyers who do not intend to stay in their homes for long, these lending mechanisms can cost a lot less than a thirty-year, fixed-rate mortgage, at least in the early part of the loan’s term. Many of these loans, including interest-only or “option” ARMs, also permitted borrowers to pay only the interest portion of the debt, or even less than that. According to an estimate, more than $2 trillion in ARMs were originated from 2004 to 2006.62 All types of ARMs present the substantial risk that interest rate increases will result in a significantly higher monthly mortgage payment.63 In addition, due to the increased risks associated with making subprime loans, the costs of a subprime loan are higher than that of a traditional loan.64

58. Streitfeld & Morgenson, supra note 42.
60. CSI: credit crunch, supra note 25.
64. See Kathleen C. Engel & Patricia A. McCoy, Turning a Blind Eye: Wall Street
interest rate of a fixed-rate subprime mortgage loan at origination was more than two percent greater than the rate of traditional loans at origination between 1995 and 2004.65 Subprime mortgage origination volume increased from less than five percent, or $35 billion, of total mortgage origination volume in 1994 to nearly twenty percent, or $625 billion, in 2005.66 In the past, the United States has never had a mortgage-backed market where such a sizeable portion of the lending product is subprime or has potential credit problems.67 Given the gravity and sheer size of these lending statistics, a substantial impact would almost certainly result if something were to go wrong.

We continue to see on a daily basis the dramatic impact of subprime loans on homeowners and communities, “with five million homeowners now delinquent or in foreclosure.”68 More then a million homes have been lost to foreclosure in the last two years, and according to data from the Mortgage Bankers Association, lenders were in the process of initiating 2.25 million foreclosures in 2008, a substantial increase over the annual average of one million during the pre-crisis period.69 It is also estimated that banks made fifteen million questionable mortgage loans from 2004 to 2007 and that ultimately ten million of those will default.70

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68. Paulson, supra note 34.
These defaults are not only causing reduced home prices because homes in foreclosure sell for less and bring down the value of other homes in the neighborhood and surrounding proximity, but they have also led mortgage lending institutions to stiffen their lending standards, "contributing to more defaults, in a downward spiral."  

To illustrate these imprudent lending and borrowing practices, take two distinct scenarios in Minnesota and California. At the age of twenty-one, Irene Thomas of North Minneapolis, Minnesota obtained ten residential properties within a ninety-day period with no money down, after she was convinced that she could become wealthy through real estate acquisitions. After incurring some $2.4 million in mortgage debt for these home purchases, Ms. Thomas failed to make the mortgage payments, and all of the properties were in foreclosure just over one year later. Now, Ms. Thomas' credit is ruined. On the West Coast, a non-English speaking Mexican strawberry picker in Bakersfield, California who earned $14,000 "was lent every penny he needed to purchase a house for $720,000." While shocking, these scenarios remain far too typical of the subprime mortgage quagmire and the breakdown of responsibility at every link in our financial system.  

Among other egregious conduct that led us here, recent news raises the question whether banks and other private mortgage originators of subprime and other "nonprime" loans were overly aggressive in their lending practices as a means to deliberately profit or attempt to profit – in economic benefit or even fraudulent gain - through reducing the amount of information they collected from borrowers. It seems that these mortgage originators were turning a blind eye to increase mortgage origination volume in order to feed the voracious appetite for  

71. Id.  
73. Id.  
74. See id.  
mortgages of the investment bankers putting together the mortgage securitizations. Some secondary market actors, including Lehman Brothers, even facilitated abusive lending in recent years. The Associated Press has also reported that a federal grand jury is investigating subprime lenders Countrywide Financial Corporation, New Century Financial Corporation and IndyMac Bancorp Inc., and noted that the FBI is also investigating IndyMac for possible fraud.

E. The Politics of Homeownership

The advocacy and pursuit of homeownership as a social policy under recent Democratic and Republican administrations has also played an instrumental role in fueling the trend towards issuing risky home loans. The Tax Reform Act of 1986 encouraged and fostered increased home lending as residential mortgages became the sole consumer loans in which the interest paid is tax deductible. Thanks to a provision of the Taxpayer Relief Act of 1997 that exempted most home sales from capital gains tax, a benefit not available to earlier generations of Americans, people were given greater incentive to plow even more money into real estate. Dating back to the early 1990s, consumers with less-than-stellar credit histories were able to gain increased access to mortgage credit at interest rates above prime borrower rates. Henry G. Cisneros, then secretary of Housing and Urban Development in the mid-1990s under President Clinton, loosened

76. See Engel & McCoy, supra note 64, at 2040 n.6 (noting that in 2003, a federal jury held Lehman Brothers liable, as an investment bank and provider of a warehouse line of credit to First Alliance Mortgage Corp. (FAMCO), a subprime lender, for aiding and abetting FAMCO’s fraud on borrowers); Christopher L. Peterson, Predatory Structured Finance, 28 CARDOZO L. REV. 2185, 2221-25 (2007) (noting how Lehman’s reputation suffered from its business dealings with mortgage originators and servicers over the course of the past decade as it was indirectly involved in predatory lending scandals in at least five separate episodes).


80. Under the law, the first $500,000 in gains from any home sale is exempt from taxes for a married couple, and the first $250,000 in gains is exempt from taxes for singles, as long as they had lived in the home for at least two of the previous five years. Id.
mortgage restrictions so that first-time buyers could qualify for loans they could not get before. At the core of the Clinton administration’s National Homeownership Strategy, which promoted homeownership as both patriotic and an easy win for all, the Department of Housing and Urban Development (HUD) alleviated many mortgage anxieties for first-time home buyers. By insuring billions of dollars in loans, changing existing regulations so that families no longer had to prove that their incomes would remain stable for five years, allowing lenders to hire their own appraisers, which often resulted in inflated house valuations, and no longer requiring lenders to interview most government-insured borrowers in person or maintain physical branch offices, HUD fueled the mortgage engine.

The Community Reinvestment Act (CRA), a Carter era program, was also used to encourage banks to lend to mortgage customers formerly considered ineligible for loans. In pursuit of a social goal—universal home ownership—banks either lowered credit standards and granted mortgages or faced fines and business penalties for Home Mortgage Disclosure Act (HMDA) or Equal Credit Opportunity Act (ECOA) violations. Gene Sperling, who served as national economic adviser to President Clinton, notes that enforcement under the CRA during the 1990s was strong and prime lending to low-income communities increased while it was done safely in order to minimize risk. Over the years, the Federal Reserve has prepared two reports for the U.S. Congress with detailed information on the performance of lending to lower-income borrowers or neighborhoods—populations at the core of the CRA. The 2000 Federal Reserve report concluded that “lending under the act was

81. See Streitfeld & Morgenson, supra note 42.
82. See id.
85. 15 U.S.C. 1691 et seq. (2006) (prohibiting creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age, because an applicant receives income from a public assistance program, or because an applicant has in good faith exercised any right under the Consumer Credit Protection Act).
86. See Michael S. Barr & Gene Sperling, Poor Homeowners, Good Loans, N.Y. TIMES, Oct. 18, 2008, at A23 (Barr serves as a professor of law at the University of Michigan).
generally profitable and not overly risky." These studies also found that lending to lower-income individuals and communities has been almost as profitable as other types of lending done by CRA-covered institutions, suggesting that the CRA did not encourage banks to procure loans that "perform out of line with their traditional businesses." But in 2003, President Bush's chief thrift regulator announced his plans to cut banking regulations and his enforcement staff, which were carried out over two years. Moreover, the CRA does not cover the majority of subprime lending since many of the largest subprime lenders are not banks. According to recent Federal Reserve data, seventy-five percent of the higher-priced mortgage loans rendered during the peak of the subprime boom were proffered by independent mortgage firms and bank affiliates—financial institutions that are not covered by the CRA. Since the overwhelming proportion of subprime loans were issued through non-banking entities that were therefore not regulated as banks, a huge portion of the mortgage market was not regulated to any significant extent. Such measures served as a detriment to the work of countless local community banks that had long histories of responsible lending to creditworthy low- and moderate-income borrowers.

The Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) were for-profit, privately-owned mortgage finance companies
whose shares traded on the New York Stock Exchange and were two of the largest companies in the United States as measured by assets until they were placed into government receivership in September 2008. Congress established Fannie Mae and Freddie Mac to facilitate a liquid national market for residential mortgages as a means to foster homeownership. These government sponsored enterprises (GSEs), which have generally held title to or guaranteed about half of the residential mortgages in the United States, operate in the secondary mortgage market by providing credit guarantees on mortgage-backed securities or directly investing in mortgages and mortgage-related securities through their retained mortgage portfolios. As of mid-November 2008, Fannie Mae and Freddie Mac owned or guaranteed almost thirty-one million mortgages, about fifty-eight percent of all single family mortgages.

In 1995, Fannie Mae and the Freddie Mac began receiving affordable housing credit from HUD for purchasing mortgage-backed securities, which included loans to low-income borrowers. Since low-income Americans are more likely to live in rental housing than in owner-occupied housing, affordable housing credit provides tax incentives for the utilization of private equity investment in the development of affordable housing aimed at low-income Americans. This policy allowed Fannie Mae and Freddie Mac to include billions of dollars that they invested in subprime loans to serve as a public good that would promote affordable housing. By expanding the type of loans that they purchased, Freddie Mac and Fannie Mae hoped to encourage banks, thrift institutions, and mortgage companies to make more loans to people with questionable credit ratings.

Moreover, in July 1999, HUD proposed that by the year 2001, fifty percent of Fannie Mae and Freddie Mac’s portfolios be

93. See id. at 1022-23.
composed of loans to low and moderate-income borrowers. In 1998, forty-four percent of the loans Fannie Mae purchased were from these groups. In 2005, HUD increased the target share of their mortgages that had to go to low- and moderate-income buyers to fifty-two percent. This action, designed to encourage those banks to extend home mortgages to individuals whose credit was generally not good enough to qualify for conventional loans, condoned the practice of subprime mortgage lending. Freddie Mac and Fannie Mae also faced increasing pressure from the Clinton administration to expand mortgage loans among low and moderate-income people and felt pressure from stockholders to maintain their phenomenal growth in profits. As a result, subprime mortgage loan originations surged by twenty-five percent per year between 1994 and 2003, resulting in a nearly ten-fold increase in the volume of these loans in just nine years. The banks and loan companies then used the cash obtained from Freddie Mac and Fannie Mae to originate more mortgages. This constant cash flow kept the housing bubble inflated.

But as far back as 1999, a sentiment existed that in moving into this new area of lending, Freddie Mac and Fannie Mae were taking on a significant amount of risk. While such actions might not pose any difficulties during flush economic times, the fact that some red flags were waved then signaled the potential for trouble in an economic downturn, prompting a government rescue similar to that which occurred for the savings and loan industry in the 1980s. Despite these signals of skepticism and caution, the Bush administration continued and enhanced the Clinton administration’s efforts to amplify homeownership as it promoted

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97. See id.
99. See Holmes, supra note 96.
100. See id.
102. See Holmes, supra note 96.
103. See id.
an "Ownership Society"—emphasizing that the United States would be a "stronger country every single time a family moves into a home of their own."President George W. Bush's promotion of expanded homeownership was aided by the American Dream Downpayment Act of 2003, which authorized subsidies to 40,000 low-income households per year to cover down payments and closing costs. To accomplish this homeownership objective, President Bush advocated new policies encouraging homeownership, like the "zero-down-payment initiative," and, just in 2007 alone, twenty-nine percent of mortgages were originated with no down payment. More exotic mortgages followed, including ones only requiring the payment of interest for the first two years of the mortgage loan term or option ARMs where the borrower chooses how much he or she wants to pay. In both cases, the outcome might very well be negative amortization, since none or not all of the principal is being repaid. Some of those mortgages went to speculators; others to responsible borrowers who were able to buy a home because of expanded access to credit. "From people dizzily drawing home equity loans out of increasingly valuable houses to banks racking up huge fees, few wanted the party to end."

F. The Current Housing Crisis: Reverberating Effects of Subprime Lending

The frightening aspect, however, is that what began as a subprime lending problem has spread to other, less-risky mortgages, and contributed to excess home inventories, defaults, and foreclosures that have pushed down home prices for even the most responsible borrowers and homeowners. Many

107. Karabell, supra note 104.
108. Streitfeld & Morgenson, supra note 42.
109. See Paulson, supra note 34.
homeowners, unfortunately, did not necessarily do anything wrong; they just bought a house near the peak of an unsustainable bubble. An estimated 8.8 million homeowners — nearly 10.8% of total homeowners — had zero or negative equity as of March 2008, meaning that they are under water because their homes are worth less than their mortgage. This provides them with an incentive to turn their house keys into their lender and walk away from their homes, despite the negative credit rating impact, because it is difficult for borrowers in financial trouble to refinance or sell their homes and pay off their mortgage if their debt exceeds their home’s value. Foreclosures are painful and costly events that destroy real estate values and force fire sales of homes — lowering the value of other homes in their neighborhoods and surrounding areas. First American CoreLogic, a real estate data company, has calculated that 7.6 million properties in the country were under water as of September 30, 2008, while another 2.1 million were in striking distance. That is nearly a quarter of all homes with mortgages. The result of homeowners being under water adds to negative market psychology and puts more pressure on an economy that is already in a substantial recession. No longer having equity in their homes, people are less inclined to shop at the mall and are unable to finance large consumer purchases such as automobiles or vacations from home equity loans. Reduced consumer spending lessens corporate profits, and contributes to additional layoffs and more mortgage defaults and foreclosures, continuing a worsening downward cycle and feedback chain.

113. See id.
114. See Hagerty & Simon, supra note 111.
III. FINANCIAL INNOVATION: THE GROWTH OF COMPLEX FINANCIAL INSTRUMENTS ON WALL STREET

A. Funding of Subprime Mortgage Loans Through Securitization

This financial crisis has been with us since July 2007. As subsequent events have demonstrated, the problem was much broader than subprime lending. The factor that levered a serious housing market bubble and collapse into a threat to the United States financial markets and, indeed, the world financial system, was the financial innovations that developed on Wall Street as a result of securitization. The transfer and diffusion of risk was supposed to be the great advance brought to the world by financial engineering and innovation. Traditionally, banks managed loans “from cradle to grave” as they made mortgage loans and retained the risk of default, called credit risk, and profited only as they were paid back.115 Lenders evaluated borrowers carefully because the lenders held the mortgages for the life of the loan and thereby carried the incentive to ensure responsible lending practices.116 As a result of financial innovation, however, banks do not expect repayment themselves, but can now sell the rights to the mortgage payments and the related credit risk to investors through a process called securitization by which individual mortgage loans are transformed into tradeable securities.117 Simply put, the originate-to-distribute model, as opposed to the originate-to-hold model, is an innovative process that allows banks to expand their lending business by originating more loans while facilitating income streams for the capital markets.118

Securitization, a close cousin of secured lending, is a structured finance process in which assets, receivables or financial instruments are acquired, classified into pools, and offered as

115. See Engel & McCoy, supra note 64, at 2049.
116. See id. at 2050.
117. See Brescia, supra note 38, at 282 (noting that the securitization of subprime mortgage loans contributed to the subprime market expansion by converting future income streams into immediate and liquid funds, which were then used to fund more home mortgage loans).
118. See Peterson, supra note 76, at 2187-88.
collateral for third-party investment. This method of financial engineering, a critical means of capital formation, wedded the mortgage industry with the capital markets. Since a liquid secondary market for individual mortgage loans does not exist, investment banks, instead, take pools of mortgage loans, split the cash flows from those receivables, and use the cash flows to make payments to bondholders, who are secured by the mortgages. As securitization became increasingly popular in recent years, home finance became more focused on feeding the appetites of national and global investors instead of assisting home buyers in their choice of an appropriate loan. The process, while complex, is made simpler by its cyclical nature. Originating lenders in the primary mortgage market sell mortgages to secondary mortgage market firms, which then sell securities or bonds collateralized by the value of mortgage loans. The secondary mortgage market firms then sell those securities backed by the mortgages that they purchased to investors and use the resulting proceeds to purchase more mortgages from primary market lenders. Simply stated, securitization entails pooling and restructuring a group of assets into a package, which is then offered to investors in the form of a security.

Securitization is an avenue to disperse risk amongst a wide group of investors and decrease risk exposures of financial institutions. The originating lender “securitized” the loan by transferring it into a pool with other mortgage loans. The bankers that assembled the pool of mortgages then sold financial instruments backed by that pool to investors. Later, those bankers also made derivative bets based on the same mortgage pool. At

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119. Wall Street has expanded its securitization structures beyond home mortgage loans to include credit card debt, automobile loans, commercial loans, equipment leases, and loans to developing nations. Moreover, receivables from essentially the entirety of income-producing assets can be securitized, including oil exploration, physician and hospital accounts, business ventures, lawsuit settlement proceeds, and even sports arenas. An illustration of the securitization of automobile loans can be found in Steven L. Schwarcz, Bruce A. Markell & Lissa L. Broome, Securitization, Structured Finance and Capital Markets (LexisNexus 2004).
120. See Engel & McCoy, supra note 64, at 2045.
121. See id.
122. See Carrillo, supra note 35, at 17.
123. See Unterman, supra note 44, at 79.
the time the group of assets is bundled into a package, investment bankers break the mortgage pool into a number of different parts, referred to as “tranches” (French for “strips”). These tranches can be structured in virtually any way the bankers structuring the securitization see fit, allowing for the tailoring of a single asset pool for a variety of risk tolerances. Each tranche has a different level of credit protection or risk exposure than another: there is generally a senior (“A”) class of securities and one or more junior subordinated (“B,” “C,” etc.) classes that function as protective layers for the “A” class. Credit rating agencies, companies that assign credit ratings for issuers of certain types of debt obligations as well as the debt instruments themselves, typically gave the senior securities AAA-rating, signifying a lower risk, while the subordinated classes received lower credit ratings, signifying a higher risk. In the event that the underlying asset pool becomes insufficient to make payments on the securities, such as when loans default within a portfolio of loan claims, the loss is absorbed first by the subordinated tranches. The upper-level tranches remain unaffected until the losses exceed the entire amount of the subordinated tranches. Pension funds typically invested in the less risky high-credit rated mortgage-backed securities, while hedge funds sought higher returns by investing in those with low credit ratings. While many were unaware, the risks that originating mortgage lenders took on under the old system had been transferred to the securitization investors as lenders no longer found it necessary to keep loans on their books, but could sell pools of them to banks and investment funds at home or abroad.

The popularity of securitization surged when investors fled the stock market seeking safer and more predictable returns following the dot-com bubble collapse during 2000 and 2001, the scandals surrounding the demise of Enron and MCI Worldcom, and the stock manipulation by Wall Street firms famously investigated by then-New York State Attorney General Eliot Spitzer.\(^{124}\) Fixed-income products and mortgage-backed securities were asset classes that were attractive to investors thanks to their

alleged safety, security, and predictability.\textsuperscript{125} Asset securitization emerged as a primary means of capital formation and attracted trillions of dollars in investments. Voracious investor demand exhausted the supply of prime mortgage loan securitizations and investment bankers began seeking subprime mortgage loans to continue to generate mortgage-backed securities. In recent years, the vast majority of subprime mortgage loans have been securitized; by 2007, lenders had securitized almost eighty percent of such mortgages.\textsuperscript{126} According to former Federal Reserve Chairman Alan Greenspan, "[w]ithout the excess demand from securitizers, subprime mortgage originations would have been far smaller and defaults accordingly far fewer."\textsuperscript{127}

A major incentive for investing in securitized instruments was that investors received higher rates of return for such financial instruments than for more secure investments like Treasury bonds, in exchange for the assumption of risk for any defaults on the underlying assets.\textsuperscript{128} As noted above, the Federal Reserve, in the aftermath of the dot-com boom's implosion, cut the federal funds rate from 6.5% to 3.5% in just a few months, and reached 1.0% by 2003. The Federal Reserve did not commence raising rates again until mid-2004, and the base inflation-adjusted short-term interest rate was negative for thirty-one consecutive months.\textsuperscript{129} Low interest rates set by the Federal Reserve, as a result, led to low returns on traditionally safe U.S. Treasury bonds. Therefore, securitized investments, which yielded a premium but many of which carried AAA-ratings even if the underlying mortgages were dubious, were quite attractive to domestic and foreign investors.\textsuperscript{130}

\begin{thebibliography}{99}
\bibitem{125} See id.
\bibitem{126} See Engel & McCoy, \textit{supra} note 64, at 2040, 2045 (noting that in 2005, total securitizations of subprime and home equity loans equaled a whopping $525.7 billion) (citing Standard & Poor's (S&P), Rating Transitions 2005; U.S. RMBS Volume and Rating Activity Continue to Set Records, tbl.1 (Jan. 24, 2006)).
\bibitem{128} See Unterman, \textit{supra} note 44, at 79-80.
\bibitem{129} See \textsc{Charles R. Morris}, \textit{The Trillion Dollar Meltdown} 59 (PublicAffairs 2008).
\bibitem{130} See Susan E. Hauser, \textit{Predatory Lending, Passive Judicial Activism, and the Duty to Decide}, 86 \textsc{N.C. L. Rev.} 1501, 1514-16 (2008); Unterman, \textit{supra} note 44, at
\end{thebibliography}
As mortgages were pooled together, investors relied on credit rating agencies to assess the underlying securities, given them a reasonably reliable prediction of expected returns without them needing to spend the time and energy evaluating each individual mortgage loan originator and each mortgage loan on their own. As the housing market started to cool in 2006 and Treasury yields fell further, more and more fixed-income investors sought mortgage-backed securities, allowing these instruments with their relatively high yields to outperform many other fixed-income instruments.

B. Mortgage-Backed Securities

Mortgage-backed securities (MBSs) are asset-backed securities whose cash flows are backed by the principal and interest payments from a pool of mortgage loans. This financial instrument became the routine method for financing the common mortgage loan. While their structures vary, their primary purpose is to transfer both the right to receive “the cash flow from pools of mortgage loans” and the associated default risks to third-party investors. In the case of fixed-rate mortgage loans, MBSs also transfer the risk of interest rate fluctuations to investors. While all investors in securities receive their pro rata share of principal and interest collections from the prior month, MBSs are also commonly known as “pass-through” certificates because the principal and interest of the underlying loans is “passed through” to investors. In this set-up, mortgage loans are pooled into a trust

79-81 (noting the confidence that certain types of securitized assets containing mortgages, such as MBSs, “were of low risk and therefore suitable alternatives to investment in government treasury bonds”); see also Paul Krugman, The Return of Depression Economics and the Crisis of 2008 150 (W.W. Norton & Co. 2009) (noting that many investors who typically only purchase AAA-rated securities were more than happy to purchase AAA-rated securitized assets that yielded higher returns than ordinary bonds) (Krugman, a winner of the 2008 Nobel Prize in Economics, teaches economics and international affairs at Princeton University); Morris, supra note 123, at 76 (noting that negative real American interest rates encouraged American investors to seek greater yields, while Japanese rates were even lower, which led foreign investors to invest in “risky American instruments”).

131. See Peterson, supra note 76, at 2213.

by a mortgage loan originator, which then sells interests in the trust to certain investors—certificateholders. The trust then passes through principal and interest payments, minus certain servicing and guaranty fees, to the investors on a pro rata basis. If any loan in the pool is prepaid, the investor receives the principal amount of that loan, and then could seek alternative investment opportunities for that portion of his or her initial investment.

There are many reasons for mortgage originators to finance their activities by issuing mortgage-backed securities. Primarily, mortgage-backed securities transform relatively illiquid financial assets into liquid and tradable capital market instruments, allow mortgage originators to replenish their funds to originate more loans, and allow issuers to remove assets from their balance sheets. Mortgage-backed securities had been very attractive to investors because they paid more than Treasury bonds, garnered high ratings from credit rating agencies, and had proved only somewhat more risky — at least until the current financial crisis. Moreover, since real estate has traditionally been and remains one of the largest sources of global wealth, they came to represent an almost unlimited investment market. For a company seeking to raise capital, it made sense for it to turn a pool of assets with projected long-term interest streams, like mortgages, into ready cash immediately. For certain individual and institutional investors, with particular risk preferences, this type of security often proved very appealing. The securitization process allows for the creation of securities that match investor preferences for particular types of risk, which broadened the availability of capital to both lenders and homeowners.

134. See id.
135. See id.
136. See Unterman, supra note 44, at 92.
137. See Hauser, supra note 130, at 1512.
C. Collateralized Mortgage Obligations

In addition, collateralized mortgage obligations (CMOs) are bonds that represent claims to particular cash flows from large asset bundles of home mortgages. While another pool of mortgage loans, they differ from mortgage-backed securities by their issuance of different classes or tranches of securities. These securities are divided into various tranches that receive credit ratings from the credit rating agencies. These ratings ranged from senior tranches (rated AAA), mezzanine tranches (AA to BB), to equity tranches (unrated). The cash flows of principal and interest payments from each tranche are paid out by order of priority in a predetermined order, with the most risky tranches receiving payment last but benefiting from the highest interest rates. Each tranche typically has different principal balances, coupon rates, prepayment risks, and maturity dates.

D. Collateralized Debt Obligations

Further expanding the potential investor base was the development of another structured product, collateralized debt obligations (CDOs), which are used to purchase asset-backed instruments, such as MBSs or CMOs with various ratings and projected returns. CDOs, an unregulated type of asset-backed

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141. See John T. Lynch, Comment, Credit Derivatives: Industry Initiative Supplants Need for Direct Regulatory Intervention--A Model for the Future of U.S. Regulation?, 55 BUFF. L. REV. 1371, 1386 (2008). A collateralized debt obligation (CDO), may be called a collateralized loan obligation (CLO) or a collateralized bond obligation (CBO) if it holds only loans or bonds, respectively.
security and structured credit product, are constructed from a portfolio of hundreds or thousands of fixed-income assets, such as actual loans or bonds. CDO securities are arranged by investment banker/securitizer into various tranches with input from the credit rating agencies. The securities pooled are typically those otherwise receiving the lowest rating by the credit rating agencies. Losses are applied in reverse order of seniority and junior tranches offer higher interest rates to compensate for the increased default risk. Usually sold with default insurance, these CDO securities had one major flaw—their balance sheet value was assessed not by the value of the underlying income streams but by their sale price in the secondary market. If there were no market—no one willing to buy these securities—the theoretical book value fell to zero.

Since 1987, CDOs have become an important and pivotal funding vehicle for fixed-income assets. The needle through which much of the air inflating the housing bubble passed was the asset-backed CDO fashioned by Wall Street’s leading investment houses and banks. Mortgage-backed CDOs, nearly forty percent of the entire $500 billion CDO market in 2006, have been one of the major purchasers of MBSs, in particular the lower-rated tranches. In 2005, firms issued $178 billion in mortgage and other asset-backed CDOs compared with just $4 billion worth of CDOs that used safer, high-grade corporate bonds as collateral. In 2006, issuance of mortgage and asset-backed CDOs amounted to $316 billion, compared with $40 billion backed by corporate bonds. Firms underwriting the CDOs generated fees of 0.4 percent to 2.5 percent of the amount sold; the fees generated on the $316 billion worth of mortgage- and asset-backed CDOs issued solely in 2006 would have ranged between $1.3 billion and $8 billion. By 2005, the amount of CDOs holding opaque and risky

143. See Hearing 3, supra note 66 (testimony of Henry M. Paulson, Jr., Sec’y, U.S. Dep’t of the Treasury).
144. See Gretchen Morgenson, How the Thundering Herd Faltered and Fell, N.Y. TIMES, Nov. 9, 2008, at BU1.
145. See id.
146. See id.
mortgage assets far exceeded CDOs composed of blue-chip corporate loans.  

Combining different types and grades of debt in one pool, these complex securities were designed to reduce the risk of the whole below the level of the individual pieces. But as very complex instruments, even the most sophisticated investors sometimes fail to appreciate their risks and substitute the rating supplied by the credit rating agency for the investors' own independent risk analysis. The complexity of CDOs often rendered them opaque even to the credit rating agencies, making the ratings suspect. Unfortunately, some institutions buying CDOs lacked the competency to monitor credit performance or estimate expected cash flows. Typically, the credit rating agencies gave a majority of the securities issued an investment grade rating, despite the fact that the pool backing the securities fell below investment grade, because they believed that any losses from the pool would be sufficiently covered by the investors in the lowest tranches. Subsequently, a major loss of confidence occurred in the validity of the process used by credit rating agencies to assign credit ratings to CDO tranches and other mortgage-related investments.

E. Derivatives and Credit-Default Swaps

Derivatives, such as stock futures, are financial instruments that can be used to limit risk; their value is "derived" from underlying assets like mortgages, stocks, bonds, or commodities. Financial derivatives are particular contracts that have no value by themselves, but, rather, receive their value from movements in interest rates, the outcome of specific events, or the price of underlying assets like debt or equities. An alternative means to

147. See id.
148. See Unterman, supra note 44, at 81.
look at derivatives is as “a form of price guarantee: an agreement between a future buyer and a future seller for something at some designated point in time.” They operate by allowing investors to place bets on the direction they believe financial markets will move, without ever needing to own tangible assets. A “credit derivative” is a contract where one party’s obligation to pay is conditioned on the occurrence of a credit event, such as a default, on another contract. Mortgage-related derivatives are among the more complex derivatives, “involving a cornucopia of exotic, jumbo-size contracts ultimately linked to real-world loans and debts.”

Credit-default swaps, a type of derivative invented by Wall Street in the late 1990s, are contractual instruments intended to insure against losses to banks and bondholders when a particular bond or security goes into default—that is, when the stream of revenue behind the loan becomes insufficient to meet the payments that were promised. Essentially, credit-default swaps (CDSs) are quasi-insurance policies on debt instruments acquired by investors, including bonds, bond indexes, and securitizations, to guard against credit losses from default. The simplest credit-default swap is a contract between two parties in which the seller protects against negative credit events in exchange for payment of a premium. The primary purpose of CDSs is to make it easier for banks to sell complex debt securities to investors, who use the CDSs as a hedge against potential losses if borrowers are unable to repay the loans. Derivatives like CDSs have been routinely paired with or included in securitized assets in order to hedge, or insure against, a negative credit event. Credit derivatives, and

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151. Lynch, supra note 141, at 1373.
152. See id.
153. Morgenson, supra note 144.
154. See Engel et al., supra note 64, at 2063; see also Jongho Kim, Ph.D., From Vanilla Swaps to Exotic Credit Derivatives: How to Approach the Interpretation of Credit Events, 13 FORDHAM J. CORP. & FIN. L. 705, 729-30 (2008); Lynch, supra note 141, at 1381-85; Lubben, supra note 150, at 411.
156. See Engel et al., supra note 64, at 2063.
157. See Unterman, supra note 44, at 89.
CDSs in particular, depend on the cash flow and performance of the agreement reached between the parties based on a specified credit risk related occurrence, such as a “failure to pay” principal or interest, “bankruptcy” of the borrower, “work-out” or “restructuring,” and changes in credit rating. As of late 2008, there remained $55 trillion in credit-default swaps outstanding, an amount more than the gross domestic product of all the world nations combined.

Despite its enormous size, the credit-default swaps market has essentially operated in secrecy, with neither public disclosure nor any legal requirement for these contracts to be reported to the U.S. Securities and Exchange Commission (SEC) or any other agency. In 2000, Congress specifically chose not to regulate credit-default swaps, as the consensus was that the market was still very small and no systemic risk would exist since investors’ inclinations to minimize their risks would protect the broader financial system. Credit-default swaps were allowed to grow with no required reserves and no regulatory supervision to assure that sellers could meet their obligations. This means that government regulators lacked any means to assess the amount of risk in the system, and whether honest trades and accurate valuations have been conducted. To value credit-default swaps and the mortgage-related securities they insure, buyers and sellers of swaps relied too heavily on financial models that could not predict the mortgage market meltdown, and placed too much trust in the credit ratings of the securities and of the financial firms selling the swaps. These ratings substantially underestimated the risk involved. In other words, the underlying sentiment was why worry about the possibility of loan defaults if credit-default swaps were available.

158. See Kim, supra note 154, at 755.
161. See Cox, supra note 159.
162. See id.
As a sign of other reform efforts to come, in mid-November 2008, then-SEC Chairman Christopher Cox executed, on behalf of the SEC, a Memorandum of Understanding with the Federal Reserve Board and the Commodity Futures Trading Commission (CFTC) dealing with central counterparties for over-the-counter credit default swaps. Cox also made repeated efforts to urge Congress to enact legislation that would bring disclosure and transparency to the complex and opaque CDS market.

F. Synthetic Collateralized Debt Obligations and Merrill Lynch—A Case Study

To complicate the picture even further, some financial firms such as Merrill Lynch engaged in synthetic collateralized debt obligations—a conglomerate of CDOs and CDSs—and another exemplar of a derivative. Unlike regular CDOs which contains loans or bonds, synthetics have been very attractive on Wall Street because they use a computer-generated group of CDOs or CDSs which can be packaged much more quickly and generate larger fees, in part because the technology has not become standardized. By 2002, when low interest rates pushed investors to seek higher returns, investors said, “I don’t want to be in equities anymore and I’m not getting any return in my bond positions,” according to William T. Winters, co-chief executive of JPMorgan’s investment bank and a member of the JPMorgan team that invented the first synthetic in 1997. As a result, they sought increased amounts of leverage and riskier asset classes. Inside even more abstract synthetic CDOs, the risk was harder to parse and much easier to overlook. These products allowed low-quality mortgage assets to be passed off as higher-quality goods, giving


164. See generally Kim, supra note 154, at 739-41 (noting that a synthetic CDO differs from the traditional cash CDO because the reference asset’s credit risk shifts to the investor, who, through securitization, benefits materially from the conversion of reference assets into a cash equivalent asset).

165. Morgenson, supra note 144.

166. See id.
banks and investors who traded them a false sense of security.\textsuperscript{167} Although CDO pioneers at JPMorgan saw their role as “financial designers and intermediaries wary of the dangers of holding on to their products too long” and only kept the highest-quality and safest portions of their product in-house, Merrill brokers seemed to bask in stockpiling increasingly risky CDOs to increase Merrill’s profit margin.\textsuperscript{168} By 2006, Merrill was the world’s largest underwriter of CDO products.\textsuperscript{169} But, by the end of 2005, Merrill learned that A.I.G., the insurer it paid to insure its CDO stakes to limit potential damage from defaults, had ceased insuring the highest-quality portions of the firm’s CDOs against default after growing concerns about overly aggressive home lending.\textsuperscript{170} Yet, even though it could not find a replacement insurer and therefore was forced to bear the risk of default itself, Merrill remained both unconcerned and unperturbed and, therefore, allowed its CDO contagion to continue.

IV. THE “ORIGINATE-TO-DISTRIBUTE” SECURITIZATION MODEL

A. Securitization Created Many Incentives to Underestimate Risk

The current financial crisis can be largely attributed to the emergence of the complex “originate-to-distribute” banking model where credit risk has been distributed broadly to investors, meaning that each party in the product chain has not carried certain responsibility or potential risk for every significant financial product. The financial boom witnessed in the first half of the 2000s decade will be remembered as an era where financial engineering and innovation overwhelmed the capacity of both regulators and financial institutions to assess risk. Perhaps not surprisingly, the financial innovations which grew out of the mortgages—derivatives built on other derivatives—were packaged and repackaged until no one could identify what they contained.

\textsuperscript{167} See id.  
\textsuperscript{168} Id.; Susan Pulliam, Serena Ng & Randall Smith, Merrill Upped Ante as Boom In Mortgage Bonds Fizzled, WALL ST. J., Apr. 16, 2008, at A1.  
\textsuperscript{169} See Morgenson, \textit{supra} note 144.  
\textsuperscript{170} See \textit{id.}; Pulliam et al., \textit{supra} note 168.
and how much they were worth. A
Expectations of continued
house price appreciation facilitated and supplemented the
mortgage securitization market, which grew increasingly complex
as the mortgage market changed from one local in nature to one
with global reach as international investors purchased packages of
mortgages for properties across the United States. While the
government sponsored enterprises Fannie Mae and Freddie Mac
had long operated by pooling mortgage loans into trusts, subject to
certain specified limitations on total loan value and eligibility,
“never before had those on Wall Street been invested so heavily in
securities backed by subprime loans.” During his tenure as
Federal Reserve chairman, Alan Greenspan opposed regulation of
the practices that allowed those subprime mortgages to be bundled
into larger securities and sold to investors, a policy and regulatory
approach he now concedes was somewhat misguided. The
absence of significant regulatory controls on how mortgages were
repackaged into larger and more complex securities served as a
central cause of the current financial crisis. Why take the time to
adequately assess and price risks if no one is looking?

These new and poorly understood instruments were
embraced by the financial world for their reputed safety and for
their high returns. Wall Street firms became enamored of the
profitability and supposed safety of their securitized credit
derivative instruments, not only originating many products but
also stocking their balance sheets with them as they had
represented a huge market with relatively high yields. Investment
banks promoted securitization, and MBSs in particular, “as the
answer to achieving high investment yields accompanied by low
risk levels.” Alan Greenspan has blamed the financial crisis on a

171. See Karabell, supra note 104.
173. See Edmund L. Andrews, Greenspan Concedes Flaws in Deregulatory
Approach, N.Y. TIMES, Oct. 23, 2008, at B1 (noting that Greenspan admitted that he
was “partially” wrong in his stance as one of the nation’s leading voices for
deregulation).
174. See Engel et al., supra note 64, at 2040-41; see also Howard Schneider,
Greenspan: ‘Crisis Broader Than Anything I Could Have Imagined, WASH. POST,
AR2008102300193.html?hpid%3Dtopnews&sub=AR.
175. Unterman, supra note 44, at 88.
heavy demand for securities backed by subprime mortgages by investors who did not worry that the housing boom might come to a crashing halt. More fundamentally, “[i]t was the failure to properly price such risky assets that precipitated the crisis,” Greenspan said, by encouraging investors worldwide to look at U.S. subprime loans as a “steal” rather than an uncertain bet that relied on escalating home values.

This insatiable appetite for risk permeated all sectors of the financial services industry. For too long, the operating assumption was that banks, operating in their own self-interest, would do what was necessary to protect themselves and their shareholders. Since lenders had incentives to “cherry pick” their loans and sell the worst ones to investors, they had reduced motivation to underwrite loans carefully. The assumption was that sophisticated analysts at banks, investment firms, and hedge funds would properly account for the risks involved, and price the investments accordingly. Yet, the quality of their financial analysis and, most importantly, the underlying risk assumptions, were completely untested in a weak market. Investment bankers continued to package dubious mortgage loans into increasingly opaque securities. While bankers are supposed to be highly skilled at valuing assets, they were incentivized by their “sky-high” bonuses before the credit crisis to attach lofty values to mortgage securities, resulting in a poor analysis of the risks involved with investing in home mortgages extended to less creditworthy borrowers. Pay was tied to profit, and profit to the easy, borrowed money that could be invested in markets like mortgage-backed securities. Given the perverse incentives of a “quick payday” once the mortgage was transferred to another for sale as a security, the broker and mortgage loan originator, both interested in generating mortgage closing fees, were motivated to package as many loans as possible, with little if any concern for the borrower’s

177. See Schneider, supra note 174.
178. See Engel et al., supra note 64, at 2048.
179. See Carrillo, supra note 35, at 3.
180. See Story & Dash, supra note 5.
likelihood of default under the mortgage loan.\textsuperscript{181} According to an estimate, the New York-based securities firms earned $540 billion by converting subprime loans into securities in the year 2006 alone.\textsuperscript{182} The whole incentive structure favored quantity over quality, as securitization associates value with the number of mortgages written, not the ability of borrowers to repay borrowed funds.\textsuperscript{183} As the former Citigroup chief executive Charles O. Prince III famously remarked, "[a]s long as the music is playing, you've got to get up and dance."\textsuperscript{184}

Yet, little did investors know that these investments were not entirely safe and sound. For too long, the risk of these dubious mortgages with high potential for default was disguised by the financially engineered instruments that had repackaged the questionable loans with higher quality debt, supposedly insuring the whole against default. Securitizations led to a system where the lender thought it need not care if mortgage loans were repaid. As MBSs, CDOs, and other forms of bundled mortgages were pooled nationwide, banks, investors, and credit rating agencies all claimed that the risk of owning such packages was lessened because of the broad diversity of loans contained in each pool. Simply, "a few lemons couldn't drag down the value of the whole package."\textsuperscript{185} Yet, a major problem with mortgage-backed securities was the "Russian roulette" issue – the likelihood of a "disastrous outcome appeared to be so low that it was ignored in the models used by the issuers and raters, and the investors were happy to rely on them."\textsuperscript{186} Accordingly, even a low probability event may signify an "unacceptable risk" – after all, few would play Russian roulette, "even if the odds were wildly in our favor,\textsuperscript{187}

\textsuperscript{181} See Brescia, \textit{supra} note 38, at 297.


\textsuperscript{183} See Hauser, \textit{supra} note 130, at 1505.


\textsuperscript{185} Morgenson, \textit{supra} note 144.

because it is a game no one can lose twice.187 And no one, least of all financial regulators, could be sure who in the global financial system was on the hook for which particular risks.188 In a recent interview, Senator Charles E. Schumer (D-NY), a member of the Senate Banking and Finance Committees, remarked that until the recent financial market distress, he himself did not fully appreciate or recognize the amount of risk Wall Street had assumed and the amount of harm its practices could inflict upon Americans.189 "It is a learning process, no question about it, an evolution," he commented, noting that he now believes that investors and homeowners must benefit from increased scrutiny and better safeguards.190

Yet, the most important popular misconception relating to mortgage-backed securities was the impression that the pooling of mortgage loans inherently reduced risk through diversification.191 While high quality mortgages do, in fact, reduce risk, the credit quality of subprime mortgage pools does not improve with the mere addition of more subprime loans.192 In other words, garbage in equals garbage out. It should come as no surprise, then, that securities composed of assets from entirely one sector are not truly diversified and their performance is held hostage to the health and vibrancy of the overall housing market — a market that has fluctuated before.193

By divorcing mortgage originators from the risk of default, securitization reduced lenders' traditional incentive to scrutinize their borrowers and encouraged excessive risk-taking and improper risk assessments. Multiple securitizations of the same loan made it virtually impossible for lenders to monitor the creditworthiness of borrowers—a task which they, in effect, outsourced to credit rating agencies.194 As these new financial

187. Id.
188. See CSI: credit crunch, supra note 25.
190. Id.
191. See Unterman, supra note 44, at 86.
192. See id. at 87.
193. See id.
194. See Donald L. Kohn, Vice Chairman, Bd. of Governors, U.S. Fed. Reserve
products were created, regulators virtually “threw up their hands and allowed the banks to apply their own (supposedly) sophisticated risk models, or to rely on bond rating agencies.” Credit rating agencies like Moody’s, Standard & Poor’s, and Fitch Ratings, paid far more to rate complex mortgage-related securities than to assess more traditional forms of debt, severely underestimated the mortgage debt risks or were blindsided by large profits when they assigned their highest credit rating of “AAA” to some securities that contained these loans. While millions of investors relied on credit rating agencies for independent, objective risk assessments of the ever increasingly complex mortgage securities they purchased, this bond of trust was badly broken. Credit rating agencies refused to account for the lending standards which sharply declined during the housing bubble, claiming that they had no responsibility to evaluate the quality of each individual mortgage loan bundled. Frank A. Raiter, who was the head of mortgage ratings at Standard & Poor’s for ten years, recently remarked that “[p]rofits were running the show.” For example, Moody’s benefited from higher profit margins during the housing bubble than those of the most elite Fortune 500 companies such as Exxon and Microsoft. Since credit rating agencies receive most of their income from the corporations they rate, certain obvious questions can be brought forth concerning their underlying motivations and levels of independence and objectivity. These credit rating agencies are now under heavy scrutiny for giving stellar ratings to securitization


195. Norris, supra note 186.
198. See Morgenson, supra note 196.
199. See Unterman, supra note 44, at 123.
transactions based on subprime loans. According to a Moody’s managing director’s anonymous response to an internal management survey in September 2007, “[t]hese errors make us look either incompetent at credit analysis or like we sold our soul to the devil for revenue, or a little bit of both.”

Undoubtedly, these credit rating agencies missed serious problems in the mortgage-related securities they allegedly scrutinized. Despite their high ratings, many of those securities, based on risky loans, would prove worthless, roiling markets and threatening financial institutions worldwide. Standard & Poor’s has downgraded more than two-thirds of its investment-grade ratings, and Moody’s has reduced assigned ratings on over five thousand mortgage-backed securities. These unrealistically positive investment-grade rating designations created a consequent surge in global demand for U.S. subprime securities by banks, hedge funds, pension funds, insurance companies, investment banks, commercial banks, municipalities, and foreign investors, and helped finance the housing boom. The world was filled with money seeking higher returns, and much of this capital was invested in U.S. assets. Many billions of dollars of these securities were also purchased by ordinary investors—typically through mutual funds, bonds, and preferred stock—who likely did not know what exactly they had purchased and were often misled as to the particular risk of their investments.

In recent years, the market for mortgage-backed securities was plagued by incredible opaqueness, considerable imprudence, and a remarkable lack of due diligence on the part of mortgage originators, the bundlers of mortgage-backed securities, and the buyers of the same. This led to severe moral hazard and information-asymmetry problems in this market. Moral hazard is the notion that those protected against certain risky behavior have an incentive to engage in such activities. Each link in the

200. See Morgenson, supra note 196 (noting that Moody’s, in recent disclosures in its regulatory filings, has indicated its receipt of subpoenas from state attorneys general and other authorities relating to its role in the financial crisis).
201. Id.
202. Morgenson, supra note 197.
203. See Berkowitz, supra note 124, at 122.
204. See Steven L. Schwarcz, Markets, Systemic Risk, and the Subprime Mortgage
mortgage chain collected profits while believing it was passing on risk: brokers, not lending their own money, pushed risk onto lenders, who sold mortgages soon after underwriting them and then pushed risk onto investors, who bought securities and hedged against the risk of default and prepayment, pushing those risks further down the pipe. More fundamentally, the financial turmoil is the aftermath of a credit boom characterized by the underpricing of risk, excessive leverage, and an increasing reliance on complex and opaque financial instruments that have proved to be extremely fragile under stress.205

B. Turning a Blind Eye: Why Worry Now If We Don’t Have To?

By the middle of 2007, a rude awakening set in as investors and consumers came to grasp that these mortgage products could be dangerous, if not poisonous, in an increasingly likely economic downturn. Even as analysts and officials began ringing warning bells about exotic mortgages and how an increasing number of mortgages were being paid late or not at all, investors saw little reason to abandon the securities backed by these home mortgage loans.206 Motivated by the dazzling fees, it seems like nobody worried about monitoring the quality of the loans, and the likelihood of whether the mortgage payments would actually be made. The cast of characters who missed signals like the rise of delinquencies and foreclosures include investment banks motivated to sell risky but lucrative mortgage debt to investors and

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investment funds, pension funds eager for high interest payments, credit rating agencies willing to hope for the best in the housing market and give superior credit appraisals, and subprime mortgage brokers who sought high sales volumes.\textsuperscript{207}

The situations at both Merrill Lynch and Citigroup are illustrative cases in point of the predominant attitude concerning investment management and risk undertaking that came to dominate Wall Street and our financial system. E. Stanley O’Neal, the former chief executive of Merrill Lynch who was displaced from his position in late 2007 due to significant write-downs and quarterly losses during his watch, commented in 2005 that “[w]e’ve got the right people in place as well as good risk management and controls.”\textsuperscript{208} Senior executives at Merrill Lynch helped push the firm’s profitable mortgage investment program and, in doing so, left their firm vulnerable to the increasingly risky business of mortgage-backed securities.\textsuperscript{209} Former Merrill Lynch executives have indicated that the firm’s top levels of management loosened internal controls and risk management oversight and went even as far as silencing critics who warned about the risks the firm was undertaking.\textsuperscript{210} Employees who “walked the floor” and talked with traders and other workers to assess the risks the firm was taking on were replaced with “loyal lieutenants” to the firm’s management who were, therefore, more concerned with achieving superior profit goals than with monitoring risk.\textsuperscript{211} In simple terms, some managers seen as impediments to Merrill’s securitization strategy were pushed out.\textsuperscript{212}

Citigroup’s economic woes are also very representative of the deficient risk management mechanisms and the quest for profit

\textsuperscript{207} See Schwartz & Bajaj, supra note 206.
\textsuperscript{208} Morgenson, supra note 144.
\textsuperscript{209} See id.; Pulliam et al., supra note 168.
\textsuperscript{210} Morgenson, supra note 144.
\textsuperscript{211} Id.
\textsuperscript{212} Pulliam et al., supra note 168 (noting that some former Merrill Lynch executives provided the example of Jeffrey Kronthal, who had imposed informal limits on the amount of CDO exposure the firm could keep on its books and on its risk of possible CDO losses and who, along with two other bond managers, was dismissed in mid-2006, a time when the housing market was still strong but was peaking).
that enveloped Wall Street. It was only at a board meeting of Citigroup executives held in September 2007, when Wall Street was already confronting a credit crisis, that Charles O. Prince III, Citigroup’s then-chief executive, became aware that his institution owned about $43 billion in mortgage-related assets. Thomas G. Maderas, who oversaw bank trading, reassured Mr. Prince and other officials at Citigroup that no substantial losses were on the horizon and downplayed the firm’s vulnerabilities. At an analysts’ call during November 2007, Gary Crittenden, Citigroup CFO, refused to give assurances that the write-downs were over, illustrating a great lack of confidence in his own valuations and a remarkable inability to value even his own firm’s holdings. Within several weeks, Citigroup announced several billions of dollars in mortgage-related losses. As a consequence of “longstanding ties that clouded their judgment,” the individuals in charge of risk management searched for easy profits and ways to increase executives’ multi-million-dollar bonuses while overlooking the significant risks that they had undertaken through subprime mortgage holdings. Between 2003 and 2005, Citigroup increased its issuance of CDOs from $6.28 billion to over $20 billion, making the bank one of the industry’s largest players, while it made up to $500 million just in fees from the CDO business in the year 2005 alone. Furthermore, Citigroup’s risk models failed to account for the possibility of a national housing downturn in which mortgage defaults would have ruinous effects on all mortgage-related investments. One little known banking analyst

214. Id.
215. See id.
216. See Morris, supra note 129, at xi.
217. See Dash & Creswell, supra note 213.
218. Id.
219. See Executive Compensation II: CEO Pay and the Mortgage Crisis, Hearing Before the H.R. Comm. on Oversight & Gov’t Reform, 110th Cong. (2008) [hereinafter Hearing 6] (testimony of Charles O. Prince III, former Citigroup chairman and chief executive) (noting that during the fall of 2007, “it became apparent that the risk models which Citigroup, the various rating agencies, and the rest of the financial community used to assess certain mortgage-backed securities were wrong”); Dash & Creswell, supra note 213; Eric Dash, Citigroup Acknowledges Poor Risk Management, N.Y. TIMES, Oct. 16, 2007, at C9.
of financial firms for Oppenheimer Securities declared more than a year ago that Citigroup’s significant mismanagement of its business engagements would impair its dividend or ultimate survival as a firm. While bankers and brokers claimed that write-downs or capital injections solved their financial woes, this analyst quickly countered with her own assertion (now recognized as having a surprising amount of validity) that the financial firms were not recognizing the true extent of their mismanagement.

When housing prices began falling in 2006, bank regulators and executives generally agreed that there would be losses, but they would be widely disseminated and the impact would be limited. They insisted, with naiveté, that the financial system had been strengthened and made more resilient by deregulation, technological innovation, and the globalization of capital flows.

V. AND THINGS WENT SOUR . . .

A. The Housing Crisis Morphs into a Banking Crisis

When the speculative fever finally broke in America’s housing industry and housing prices began falling in search of equilibrium levels, banks and financial institutions everywhere suffered defaults and subsequent losses on a range of assets. The deflation of the housing bubble has brought a steep rise in mortgage defaults and foreclosures which, together with concerns about poor mortgage underwriting standards, have caused substantial declines in the values of MBSs. As the payments from borrowers on the mortgages in the securitization pool became delinquent or stopped altogether, the value of the mortgage-backed securities began to decline and become uncertain, costing portfolio managers millions or billions of dollars in losses. These MBSs and other forms of widely held securitized debt, especially


221. Id.


223. Id.
the subordinate tranches, quickly became "toxic waste" on the balance sheets of major banks and financial institutions, forcing them to incur huge write-downs, as accounting rules required that the assets be marked-to-market. The intent of the mark-to-market accounting standard is to keep markets transparent by helping investors understand the value of these assets at a point in time, rather than just their historical purchase price. As we marched through 2007 and into 2008, more banks and financial institutions found that the securities they thought were safe were tainted with what came to be called "toxic mortgages." Indeed, the housing contraction has caused large losses for anyone who bought assets backed by mortgage payments.

The losses on these widely held mortgage-related investments have created an enormous capital hole on the balance sheets of many financial institutions. These heavy financial losses have left many financial institutions with too little capital. As asset write-downs have been made, these financial institutions have needed to raise capital to cover the losses. Furthermore, as the financial markets progressively lost faith in asset-backed securities and as housing prices continued to fall, bids for these securities became scarce. The losses on the assets also reduced the institutions' capital, resulting in increased pressure to maintain capital at the minimum levels required by regulation. The soundness of any investment firm depends, to a significant degree, on other financial firms having confidence that it has real assets standing behind its investments. Any institution that seems to have had a high-risk portfolio, regardless of whether it has had enough assets to support the portfolio, has faced two substantial setbacks occurring at the same time: investors demanding their money back, and lenders refusing to do any more business with them. Individual firms that owned large amounts of these securities were caught in a downward spiral of devalued securities

224. See Kashkari, supra note 59 (stating that "[c]apital is essential for a healthy financial system; it permits banks to take risks and absorb losses while honoring their obligations to depositors and other creditors. During an economic downturn, many businesses and consumers want to see extra capital in their bank in order to have confidence the bank is sound and their money safe. Similarly, in such times, many banks want to see increased capital in other banks in order to have confidence to do business with them").
and reduced capital. Such actions progressively undermined the market value of the firms’ stock and market confidence in the firms’ solvency. Because financial institutions have had too little capital relative to their assets, they have not been able or willing to provide the credit the economy needs. The erosion of capital has resulted in some instances in bankruptcy or insolvency in the case of FDIC-insured banks. Those institutions able to raise a sufficient amount of capital have so far been able to survive, while those unable to raise adequate capital have failed, sometimes quite unexpectedly and with devastating impact. In short order, the housing contraction morphed into a severe banking crisis.

Securities firms are not subject to as stringent a minimum capital requirement as banks.225 If, however, they are owned by a bank or financial holding company, the holding company on a consolidated basis is subject to the bank capital requirements to ensure that it is operated in a manner that does not threaten the viability of its depository institution subsidiaries.226 As a result of this regulatory landscape, many investment banks retained limited capital reserves to address significant declines in mortgage-backed securities, other mortgage-related investments, or to support their side of credit default derivative insurance contracts, creating a huge liquidity crisis.

B. The Fallout at Bear Stearns

The paralysis in the credit markets and the collapse of liquidity in these MBSs led to continued substantial write-downs in 2007, 2008, and 2009. In June 2007, Moody’s, a credit rating agency, slashed the ratings of 131 securities backed by subprime mortgages and said it was reviewing the grades of 136 others.227 In terms of failure of a major financial institution, the first shoe to

225. See 17 C.F.R. § 240.15c3-1 (2008) (providing the net capital requirements for brokers or dealers).

226. The Gramm-Leach-Bliley Act of 1999, which repealed the Glass-Steagall Act, dismantled the remaining Depression-era restrictions and allowed commercial banks, investment banks, and insurance companies to be operated under the same holding company. These changes allowed consolidated financial holding companies to expand well beyond their traditional role as lenders and profit from a broad variety of financial activities.

227. CSI: credit crunch, supra note 25.
drop was at the Bear Stearns Companies, Inc., an investment bank based in New York City that had borrowed $33 for every dollar of assets it had.\footnote{See Daniel Gross, A Risk Worth Taking, NEWSWEEK, Nov. 24, 2008, http://www.newsweek.com/id/169160.} Bear Stearns was severely damaged by the July 2007 collapse of two giant hedge funds, together once worth an estimated $1.5 billion, which had suffered huge losses after betting on securities backed by subprime mortgages.\footnote{See Gretchen Morgenson, Bear Stearns Says Battered Hedge Funds Are Worth Little, N.Y. TIMES, July 18, 2007, at C2; CSI: credit crunch, supra note 25.} This particular financial firm was one of the largest global investment banks and securities trading and brokerage firms prior to its eventual collapse in March 2008 due to its inability to find sufficient capital to cover its mortgage-related losses. On March 14, 2008, after a consistent decline in the market for subprime mortgages, JPMorgan Chase, in conjunction with the Federal Reserve Bank of New York, provided a twenty-eight day emergency loan to Bear Stearns in order to avert the sudden collapse of the company and prevent the potential market crash that would result from Bear Stearns becoming insolvent. The company could not be saved, however, and was sold to JPMorgan Chase for approximately ten dollars per share, a price far below the $172 a share it traded at as late as January 2007, although not as low as the two dollars per share originally agreed upon by Bear Stearns and JPMorgan Chase.\footnote{See Andrew Ross Sorkin, JP Morgan Raises Bid for Bear Stearns to $10 a Share, N.Y. TIMES, Mar. 24, 2008, http://www.nytimes.com/2008/03/24/business/24deal-web.html.}

In addition, the Federal Reserve agreed to issue a non-recourse loan of $29 billion to JPMorgan Chase, thereby assuming the risk of Bear Stearns’s less liquid assets. This means that the loan is collateralized by mortgage debt and that the federal government cannot seize JPMorgan Chase’s other assets if the mortgage debt collateral becomes insufficient to repay the loan. The Federal Reserve defended the bailout by stating that a Bear Stearns’ bankruptcy would have affected the real economy and could have caused a substantial and rapid unwinding of investments across U.S. markets.\footnote{See Turmoil in U.S. Credit Markets: Examining the Recent Actions of Federal Financial Regulators: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs, 110th Cong. (2008) [hereinafter Hearing 7] (testimony of Ben S. Bernanke, 2009].} Bear Stearns, and other institutions as well,
wound up in trouble not as a result of problems with “economic fundamentals” but, rather, due to the falling prices of mortgage-backed securities which forced these institutions to mark their securities down to the deflated market prices. As a result, these institutions’ contractual counterparties became fearful that they would not be able to settle trades with clients and then, as in the Bear Stearns’ situation, refused to do further business with such institutions.

C. Interest Rate Reductions

The risks to the broader economy created by the financial market crisis and housing market downturn were also primary factors in several decisions by the Federal Reserve to cut interest rates. Between September 2007 and May 2008, the target for the federal funds rate, the benchmark interest rate, was lowered from 5.25% to 2%, and the discount rate was lowered from 5.75% to 2.25%, through six separate actions. As the U.S. continues to confront a severe financial crisis and recession, the Federal Reserve recently cut its target interest rate again to between zero and a quarter percentage point, reaching historic lows. Another Federal Reserve lending rate, the discount rate, will drop to half a percentage point, a level not seen since the 1940s, as the Federal Reserve expects interest rates to remain “exceptionally low” for some time. While lower rates generally spark borrowing and boost economic activity in normal times by reducing the cost of borrowing for households, businesses, and financial institutions, those effects are offset now as many businesses and households are increasingly burdened by heavy debts. Traditionally, interest rate reductions have served as the main ammunition used to confront a recession, but these recent cuts have not slowed the economy’s

Chairman, Bd. of Governors, U.S. Fed. Reserve Sys.).

232. Schwarcz, supra note 204, at 214.
233. Id.
decline – a remarkable illustration of the serious challenges this particular recession poses to government officials, policymakers, and ordinary Americans alike.

D. Continued Fallout – the Losses Keep Mounting

While the Federal Reserve took unprecedented steps to bolster Wall Street and the financial markets, the losses still mounted. For the fourth quarter of 2007, Morgan Stanley took a $9.4 billion loss related to subprime-related investments, and in January 2008, Citigroup announced that it was writing down $22.2 billion due to “mortgage-related investments and bad loans.”

Exposure to these mortgage-backed securities, or to the credit derivatives used to insure them against failure, threatened an ever increasing number of banks and financial and investment firms. Rating agencies lowered the credit ratings on $1.9 trillion in mortgage-backed securities from the third quarter of 2007 to the second quarter of 2008. These factors placed additional pressure on financial institutions to lower the value of their mortgage-backed securities. Hedge funds began to find it more difficult to get financing as Wall Street banks, themselves feeling the pain of the credit squeeze, became less willing to lend money against mortgage securities. As investors lost confidence in them, these firms saw their access to liquidity and capital markets increasingly impaired and their stock prices drop sharply. On July 11, 2008, IndyMac Bank, the largest mortgage lender in the U.S. at the time, collapsed and its assets were seized by federal regulators after the institution succumbed to the pressures of tighter credit, tumbling home prices, and rising foreclosures. IndyMac Bank’s failure marked the third largest bank failure in U.S. history.

The Bear Stearns bailout briefly lulled the financial markets into thinking that the worst might be over. But, conditions continued to deteriorate. In August 2008, government officials became concerned as the stock prices of the loss-plagued finance giants Fannie Mae and Freddie Mac, the linchpins of the housing market, slid sharply. "From 2005 to 2008, Fannie Mae purchased or guaranteed $270 billion in loans to risky borrowers—triple the amount in all its earlier years combined.\footnote{240} These actions, which would turn out to be a serious mistake in risk management, were largely due to efforts by shareholders and managers to recover the securitization market share lost to unregulated investment banks which had received "absurd AAA ratings for packaging subprime dross."\footnote{241} The Federal Reserve had issued repeated cautions about the systemic risks posed by Fannie Mae and Freddie Mac's large portfolios of mortgages and mortgage-backed securities, in addition to the inherent conflicts arising from the tension between shareholders' goals and the government's objectives for these two institutions.\footnote{242} Given the substantial losses in their mortgage portfolios, raising sufficient new capital from private investors was infeasible and the government-sponsored status of the two firms did not leave available the option of a merger with or acquisition by another company.\footnote{243} To preclude "unacceptably large dislocations in the financial sector, the housing market, and the greater economy," the Federal Housing Finance Agency (FHFA) placed Fannie Mae and Freddie Mac into conservatorship on September 7, 2008, and the Treasury used its authority, granted by Congress in July 2008, to invest as much as $200 billion in preferred stock of Fannie Mae.

\footnote{240}{Barr & Sperling, \textit{supra} note 86.}  
\footnote{241}{Id.}  
\footnote{243}{Id.}
and Freddie Mac and at least $5 billion in their mortgage securities.\textsuperscript{244}

\textbf{F. Say Goodbye to Lehman and Merrill Lynch}

Notwithstanding this string of substantial government intervention, investors' and creditors' concerns about funding and credit risks at financial firms intensified during the latter part of the summer of 2008 as mortgage-related assets deteriorated further, economic growth slowed, and uncertainty about the financial and economic outlook increased. The housing market downturn continued to have a substantial impact on the performance of leading financial institutions' mortgage portfolios and led to multiple quarters of multi-billion dollar losses. Leading banks and financial institutions came under heavy pressure because they possessed insufficient capital. As mortgage-related losses mounted, investors and creditors lost confidence in the ability of certain firms to meet their obligations and risk aversion heightened. Customers began pulling their money out of brokerage accounts, concerned about the safety of their assets. As a result, financial institutions, seeing their access to capital markets as well as to short-term funding markets become increasingly impaired and their stock prices fall significantly, faced additional pressure to raise more capital to cover these losses and the outflows of brokerage deposits. All three major stock indices in the United States (the Dow Jones Industrial Average, NASDAQ, and the S&P 500) entered a bear market by late summer 2008. But it was the weekend of September 13, 2008, and the moment that then-Treasury Secretary Henry M. Paulson Jr. had feared for months was finally here: Lehman Brothers, the renowned global financial services firm with billions of dollars in bad mortgage-related investments on its books, was hurtling toward bankruptcy—rapidly. When the stock markets opened on Monday, September 15, 2008, a slew of financial concerns, including a host of legitimate worries about Lehman's fate, caused the Dow Jones industrial average to drop by 504.48 points, or 4.4%—the sharpest

\textsuperscript{244} Id.
drop since the September 11, 2001 terrorist attacks—as a record volume of over eight billion shares were traded on the New York Stock Exchange.\textsuperscript{245}

The collapse of the major investment bank Lehman Brothers on September 15, 2008 became the largest bankruptcy in American history.\textsuperscript{246} Its cascading effects sent shockwaves across not only the United States, but the rest of the globe as well. The complex debt products held by major financial institutions such as Lehman Brothers and others proved to be “risk bombs,” as there was no central exchange, or open marketplace, where the mortgage-backed securities were listed or traded.\textsuperscript{247} This meant that no one recognized or comprehended how substantial the failure of risk management really was. The firm said its third-quarter 2008 losses could total almost $4 billion. Lehman’s clearing bank, J.P. Morgan, wanted an extra $5 billion in collateral, and Lehman’s attempts to raise money from a Korean bank had stalled. Credit rating agencies warned that if Lehman was unable to raise more capital immediately, it could face a downgrade, likely forcing it to put up more collateral for its outstanding loans and increase its costs for new loans. Attempts to organize a consortium of private firms to purchase some of Lehman’s toxic assets and efforts to persuade other banks such as Bank of America and Barclays to acquire Lehman were unsuccessful as the potential suitors backed out of negotiations after the federal government refused to offer guarantees to possible buyers. Simply stated, “buyers walked away for one reason: they could not get the equivalent kind of government backing that had facilitated the Bear Stearns deal.”\textsuperscript{248} With respect to public sector solutions, the government determined that either facilitating a sale of Lehman or maintaining the company as a free-standing entity would have required a very sizable injection of public funds—much larger than

\begin{itemize}
  \item \textsuperscript{247} Lohr, \textit{supra} note 222.
\end{itemize}
for Bear Stearns—and would have involved the U.S. taxpayers' assumption of billions of dollars of expected losses.\textsuperscript{249} Under the law, the Federal Reserve has the authority to lend to any nonbank, but only if the loan is "secured to the satisfaction of the Federal Reserve bank."\textsuperscript{250} Even if these costs could be justified on public policy grounds, neither the Treasury Department nor the Federal Reserve had the authority to commit public money in such fashion; in particular, the Federal Reserve's loans "must be sufficiently secured to provide reasonable assurance that the loan will be fully repaid."\textsuperscript{251} Such collateral was not available here.

The decision to allow Lehman to fail resulted in global panic sweeping over the financial system, causing other banks to fall like dominos and "turn[ed] a financial tremor into a tsunami."\textsuperscript{252} The government's unwillingness or inability to prevent Lehman's failure added more fear to already shaken financial markets. Lehman's failure, in particular, created financial havoc and fear because numerous investors who had uninsured accounts with, or other financial exposure to, Lehman, suddenly lost the ability to access their cash, with no idea of how much, if anything, they would be able to eventually recover.

Beginning with the bankruptcy of Lehman Brothers, the financial crisis entered an acute phase marked by failures of prominent American and European banks and sweeping efforts by the American and European governments to rescue distressed financial institutions. After an exhausting and arguably unfulfilling weekend of talks between Wall Street executives and federal officials over the fate of Lehman Brothers, fear spread that Merrill Lynch, also staggered by mortgage losses, could also falter. Like Bear Stearns before them, both Lehman Brothers and Merrill Lynch were more deeply involved than other institutions in the securitization market that allowed too many mortgages to get into the hands of unqualified homebuyers. Merrill's clients began to

\textsuperscript{249} Bernanke, \textit{supra} note 242.
\textsuperscript{251} Bernanke, \textit{supra} note 242.
pull their money out and the firm’s stock plunged. Merrill Lynch, a blue-chip investment house and bedrock global financial services institution founded in 1914 and the nation’s largest brokerage firm, had long promoted the idea that anyone, not just the rich, should invest in the markets. Yet this same institution, which had lost more than $45 billion on its mortgage investments, twice the total amount of profit the firm made in the two and a half years prior to the credit crisis, agreed to sell itself on September 14, 2008, to Bank of America for $50.3 billion in stock. It was “a remarkable fall from grace for the 94-year-old Merrill, whose corporate logo— a bull— had long symbolized the fundamental optimism of Wall Street.”

However, the demise of Merrill Lynch might have seemed inevitable to some. Since the financial crisis first began, Merrill was among the firms most deeply affected. Under the leadership of its former chief executive, E. Stanley O’Neal, Merrill made aggressive moves into the mortgage market and became one of the leading issuers of investment vehicles linked to subprime mortgages and other risky forms of debt. In 2003, Merrill Lynch hired Christopher Ricciardi, an expert in CDOs from Credit Suisse, then the leading underwriter of CDOs. Such moves helped make the firm become the largest underwriter of CDOs in the world by the end of 2003, a distinction it retained in 2004, 2005 and 2006. As the firm bundled mortgage debt— even derivatives of derivatives— and made a string of twelve acquisitions of residential or commercial mortgage-related companies or assets to capitalize on the housing boom between January 2005 and January 2007, Merrill’s revenue and earnings reached record levels, and, in

254. See id.
255. Id.
258. See id.; Pulliam et al., supra note 168.
2006, its stock prices had soared by forty percent for the year.\textsuperscript{259} Merrill Lynch appeared to have no liquidity concerns; after its record year of profits in 2006, it produced another solid earnings report in the first quarter of 2007, finally surpassing its three main rivals, Lehman Brothers, Goldman Sachs, and Bear Stearns, in profit growth.\textsuperscript{260} But as 2007 progressed and mortgage defaults and foreclosures started piling up, the debt ratings on CDOs were cut.\textsuperscript{261} As the waves of borrower defaults continued in 2007, Merrill was left with $71 billion of eroding investments and billions in losses.\textsuperscript{262} “It turned out our assessment of the potential risk and mitigation strategies were inadequate,” O’Neal commented.\textsuperscript{263} In October 2007, Merrill shocked investors when it announced a $7.9 billion write-down related to its exposure to mortgage CDOs, resulting in a $2.3 billion loss, its largest ever in history.\textsuperscript{264} In a conference call with analysts in October 2007, O’Neal added that “[w]e got too big in this area. Primary mistakes were errors of judgment and understanding the nature of the risk and the markets changing for the securities.”\textsuperscript{265}

Multi-billion losses kept piling up, however, and Merrill struggled to raise sufficient capital to sustain itself. John A. Thain, the new chief executive who had previously held senior positions at the New York Stock Exchange and Goldman Sachs, liquidated assets for whatever price he could obtain to try to salvage the firm. In late 2007, Thain, seeking to regain investors’ trust by strengthening and solidifying the firm’s risk management and helping Merrill work through its heavy CDOs exposure, rehired the risk-conscious bond executive\textsuperscript{266} Merrill had previously dismissed in 2006 when it aggressively pushed to increase its bets on CDOs.\textsuperscript{267} Mr. Thain also undertook seven major transactions during the summer of 2008 with the aim to strengthen Merrill.

\textsuperscript{259} See Morgenson, supra note 144.
\textsuperscript{260} Id.
\textsuperscript{261} Id.
\textsuperscript{262} Id.
\textsuperscript{263} Morcroft, supra note 256.
\textsuperscript{264} Morgenson, supra note 144.
\textsuperscript{265} Barr, supra note 257.
\textsuperscript{266} See supra note 212 and accompanying text.
\textsuperscript{267} See Pulliam, supra note 168.
These actions included the sale of Merrill’s $4.4 billion stake in Bloomberg, the financial news and data service, the raising of $9.8 billion of common equity, and the sale of $31 billion of its CDOs to an investment firm for twenty-two cents on the dollar.\(^{268}\) Despite these efforts, Merrill recorded net losses of $14.7 billion on its CDOs, for the first nine months of 2008, and through October 2008, some $260 billion of asset-backed CDOs started to default.\(^{269}\) As these problems deepened, Merrill’s shares plummeted. In a startling turn of events, Bank of America’s acquisition of Merrill Lynch marked the end of an era for “the brokerage firm that brought Wall Street to Main Street.”\(^{270}\)

G. The Demise of American International Group (A.I.G.)

While perhaps manageable by itself, Lehman’s default was also combined with the unexpectedly rapid collapse of American International Group (A.I.G.), an insurance giant then on the verge of failure because of its exposure to risky mortgage-related investments and credit-default swaps. A.I.G.’s financial arm, A.I.G. Financial Products, had accrued a very sizeable amount of exposure to mortgage-related assets, and as a result, it was carrying enormous unrecognized losses on its books. On September 15, 2008, the same day that Lehman Brothers announced its bankruptcy, A.I.G.’s auditors forced A.I.G. to recognize some of these losses. Although A.I.G. had issued $440 billion in credit-default swaps, only 0.8% of credit-default swaps outstanding, markdowns on A.I.G.’s investments in subprime mortgages led to significant downgrades in its credit ratings, causing the holders of the credit-default swaps to demand more collateral, which A.I.G. could not provide.\(^{271}\) On September 16, 2008, the Federal Reserve, with the support of the Treasury, provided an $85 billion emergency credit line to facilitate an orderly resolution.\(^{272}\) In exchange for making the loan, the Fed was

\(^{268}\) See id.; Story, supra note 253.
\(^{269}\) Morgenson, supra note 144.
\(^{270}\) Story, supra note 253.
\(^{271}\) Cox, supra note 159.
\(^{272}\) See Press Release, Bd. of Governors, U.S. Fed. Reserve Sys., Federal Reserve Board, with full support of the Treasury Department, authorizes the Federal Reserve
promised a 79.9% stake in A.I.G.\footnote{See id.} A.I.G. negotiated the original \$85 billion revolving credit line with the Federal Reserve after its efforts to raise money from private lenders failed in the panic of mid-September. The government’s initial intervention was driven by concern that A.I.G.’s failure to meet its obligations in the credit-default swap market would create a global financial meltdown.\footnote{See id.}

The amount that A.I.G. needed, however, ballooned very shortly, as counterparties to A.I.G.’s insurance on complex debt securities laid claims to whatever collateral they could get. The original emergency loan was later supplemented by a \$38 billion lending facility in early November 2008 when it became clear that the original amount was insufficient.\footnote{See Press Release, Bd. of Governors, U.S. Fed. Reserve Sys., Federal Reserve Board and Treasury Department announce restructuring of financial support to AIG (Nov. 10, 2008), available at http://www.federalreserve.gov/newsevents/press/other/20081110a.htm.} A.I.G. has needed more money than expected, and it has not been able to sell subsidiaries quickly enough to pay down the loan as required. The government’s original emergency line of credit, while saving A.I.G. from seeking bankruptcy protection for a time, accelerated the company’s problems; the original emergency loan came with a high interest rate — about fourteen percent — which forced the company into a rushed asset sale which hindered its capacity to repay the loan, jeopardizing its solvency.\footnote{Matthew Karnitschnig, Serena Ng & Liam Plevin, \textit{U.S. Throws New Lifeline to AIG, Scrapping Original Rescue Deal}, WALL ST. J., Nov. 10, 2008, http://online.wsj.com/article/SB122630276296413267.html?mod=testMod; see also Andrew Ross Sorkin & Mary Williams Walsh, \textit{U.S. Provides More Aid to Big Insurer}, N.Y. TIMES, Nov. 10, 2008, http://www.nytimes.com/2008/11/11/business/economy/11aig.html?_r=1&hkp&oref=slogin.} By mid-November 2008, after signs that the initial bailout was overly burdensome on the company, the federal government announced an overhaul of its original bailout of A.I.G., replacing it with a new package worth around \$150 billion.\footnote{See Press Release, supra note 275.} The \$150 billion in government aid consists of a \"\$60 billion loan, a \$40 billion preferred-stock investment with Bank of New York to lend up to \$85 billion to the American International Group (AIG) (Sept. 16, 2008), available at http://www.federalreserve.gov/newsevents/press/other/20080916a.htm.\}
funds from the Troubled Asset Relief Program (TARP) and about $50 billion in capital largely intended to purchase distressed assets.\footnote{278} These funds will help A.I.G. purchase CDOs and mortgage-backed securities from institutional investors which the company had agreed to insure against default, a role which has forced it to put up large amounts of cash as collateral as the global economy has soured and securities have increasingly weakened and defaulted.\footnote{279} The Federal Reserve took these actions because it judged that, in light of the prevailing market conditions and the size and composition of A.I.G.’s obligations, a disorderly failure of A.I.G. would have severely threatened global financial stability and the performance of the U.S. economy.\footnote{280} In early December 2008, A.I.G. disclosed that it owed Wall Street’s largest firms about $10 billion for speculative trades that have soured, highlighting the challenges the company continues to face as it seeks to recover under the U.S. government rescue plan. This latest news also indicates that A.I.G. has been “gambling with its own capital” by speculating on the direction of pools of mortgage assets and corporate debt.\footnote{281}

When pressed about why it was legal for the Federal Reserve to lend billions of dollars to Bear Stearns and A.I.G. but not Lehman Brothers, then-Treasury Secretary Henry M. Paulson Jr. emphasized that Lehman’s bad assets created “a huge hole” on its balance sheet; by contrast, Bear Stearns and A.I.G. had more trustworthy collateral.\footnote{282} But perhaps most significantly, the era of less government and reliance on market forces has ended: when the restructured deal is complete, taxpayers will have invested and lent a total of $150 billion to A.I.G., the largest government rescue of a single private enterprise in history.\footnote{283}

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\footnote{278. See id.; Walsh, supra note 276; Karnitschnig, Ng & Plevin, supra note 276.}
\footnote{279. See id.}
\footnote{280. Hearing, supra note 4 (testimony of Ben S. Bernanke, Chairman, Bd. of Governors, U.S. Fed. Reserve Sys.).}
\footnote{282. See Nocera & Andrews, supra note 248; supra note 244 and accompanying text.}
\footnote{283. See Sorkin & Walsh, supra note 276.}
H. WaMu and Wachovia Succumb

Even after those dramatic and eye-opening events, more depressing news followed. During the same month, Washington Mutual (WaMu), which at the time was the sixth-largest bank in the United States, declared bankruptcy. WaMu, a Seattle-based bank, stands out as a particularly noteworthy case of lax lending. By the first half of 2008, the value of its bad loans had reached $11.5 billion, nearly tripling from $4.2 billion a year earlier, and its adjustable-rate mortgages expanded from about one-fourth of new home loans in 2003 to 70% by 2006. In 2007, it incurred a $67 million loss and closed its subprime lending unit. When shareholders attended WaMu's annual meeting in Seattle in April 2008, WaMu had recorded a first-quarter loss of $1.14 billion and increased its loan loss reserve to $3.5 billion, while its stock had lost more than half its value in the prior two months. As market conditions worsened, pressure on WaMu intensified; an outflow of deposits began on September 16, 2008, totaling $16.7 billion. With insufficient liquidity to meet its obligations, WaMu was in an unsafe and unsound condition to transact business. Its federal regulator, the Office of Thrift Supervision, closed that company and appointed the Federal Deposit Insurance Corporation (FDIC) as receiver, which then immediately sold the institution to JPMorgan Chase. This was the largest bank failure in American history.

Wachovia Corporation, a financial services holding company, also witnessed a dismal financial outlook as a result of its substantial exposure to subprime mortgages. Wachovia's recent struggles can be traced back to a single, mistaken deal at the height of the housing bubble in May 2006: its $25 billion purchase of

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284. See id.
285. See id.
286. See id.
288. See Press Release, Office of Thrift Supervision, Washington Mutual Acquired by JPMorgan Chase (Sept. 25, 2008), available at http://ots.gov/?p=PressReleases&ContentRecord_id=9e306e81-1e0b-8562-eb0c-fed5429a3a56&ContentType_id=4c12f337-b5b6-4c87-b45c-838958422bf3.
Golden West Financial Corporation, a savings and loan that became one of California’s largest lenders. When former Wachovia Chief Executive Officer Ken Thompson brokered the deal to purchase Golden West Financial, he commented that he had acquired “a crown jewel” of the mortgage business. As a result of this acquisition, however, Wachovia acquired substantial exposure to subprime mortgages in California and Florida, both hot real estate markets that went bust. The great majority of those home loans were option ARM loans—“Pick-a-Pay”—which permitted borrowers to choose the mortgage payment amount each month (even allowing them to make payments so small that they did not cover interest charges), with unpaid interest added onto the mortgage and increasing its balance, not shrinking it as is normally the case.\footnote{289} Golden West Financial’s mortgage-related problems led to Wachovia suffering write-downs and losses that far exceeded the price it paid for the acquisition, with Wachovia taking a 376% write-down as a percentage of earnings by early October 2008.\footnote{290} As a means to avoid serious adverse effects on economic conditions and financial stability, Citigroup offered a bid for Wachovia’s banking operations in which it offered to pay about $1 a share, or about $2.2 billion, for Wachovia’s banking operations in a deal brokered by the FDIC and which included a commitment from the federal government to take losses above a certain level on a large portfolio of Wachovia’s risky loans.\footnote{291} But in an interesting turn of events, Wells Fargo came in with an alternative bid for all of Wachovia’s operations, including its brokerage division, at a higher share price and without taxpayer help. On October 12, 2008, the Federal Reserve approved Wells Fargo’s takeover, a deal that created the largest bank branch network in the U.S.\footnote{292} The merger ultimately closed on December 31, 2008, for a total purchase price of $12.68 billion.\footnote{293}

\footnote{289. See David Enrich & Dennis K. Berman, Wachovia to Receive Big Infusion of Capital, WALL ST. J., Apr. 14, 2008, at C1.}
\footnote{290. Story & Dash, supra note 5.}
\footnote{291. See Bernanke, supra note 242.}
\footnote{293. See Dan Fitzpatrick, Three Banks Complete Deals, WALL ST. J., Jan. 2, 2009,
Washington Mutual and Wachovia were the latest casualties of a financial crisis that drove Lehman Brothers and IndyMac Bank out of business and led to the hastily arranged rescues of Merrill Lynch and Bear Stearns. In response to the crisis, the last large independent investment banks, Goldman Sachs and Morgan Stanley, elected to become bank holding companies in order to gain access to additional liquidity and capital.²⁹⁴

I. The Credit Markets Freeze Up

As Wall Street banks faced waves of multibillion-dollar losses, the crisis that began with subprime mortgages continued to spread its way through the credit markets. Uncertainty over the quantity and valuation of banks' "toxic assets" has meant that many institutions could not count on loans from each other to meet daily needs, and this illiquidity in the markets has impaired their ability and willingness to lend. Among banks that had leveraged their capital excessively through borrowing and other financing devices, the mortgage-related losses wiped out much or all of their capital, and this near-insolvency has dampened their willingness to lend. Such factors undermined the strength of otherwise sound financial institutions and prevented them from financing productive loans, creating unwelcome effects on the availability of credit and the value of savings. Excessively loose monetary policy that helped to foster the credit bubble saw loans made to not just subprime borrowers, but to all types of poor risks, including overleveraged companies. Perhaps not surprisingly given these other societal excesses, financial institutions also borrowed too much as financial sector debt outstanding grew to $16 trillion in 2007 from $10 trillion in 2002.²⁹⁵ Financial firms have found it difficult or impossible to finance this overhang of borrowing; this has caused many financial institutions to shrink or


²⁹⁵. See Hilsenrath et al., supra note 70.
collapse. According to Peter Fisher, co-head of fixed income at BlackRock, the asset-management firm, the current financial crisis "is not just about homeowners defaulting on their mortgages," but it is also about "financial institutions not being able to sustain their liabilities," given their sizeable overextension. If the banks are not growing, then credit cannot see growth either.

This combination of factors led to a critical stage during the fall of 2008 when the entire U.S. financial system was at risk. As a result, the financial crisis began to affect the general availability of credit to individuals, non-housing related businesses, and financial institutions. Corporate bond and credit-default spreads witnessed continued increases, industrial companies saw sharply reduced access to all aspects of the bond market, the commercial paper market became impaired, and companies with no direct connection to the financial sector lost access to the credit markets needed to meet payrolls, pay suppliers, and purchase inventory. Personal savings and retirement accounts have been threatened, and the ability of consumers and businesses to borrow and finance spending, investment, and job creation has been significantly disrupted. While investors are hesitant to commit capital to financial institutions because of this widespread uncertainty, it is this investor confidence that is critical to restore needed liquidity and enhance the stability of our financial system. The Federal Reserve and Treasury Department expected the economy to weaken but not as rapidly as it has, with declining consumer confidence, falling home starts, slumping retail sales, and falling industrial production. Consumers, who comprise seventy-two percent of the U.S. economy, are pulling back on their spending amidst a brutal tightening of credit conditions on everything from car loans to credit cards and home equity loans.

296. Id.
297. Id.
299. See Guha, supra note 13.
The deepening of the financial crisis also saw the inability of businesses to issue commercial paper, the short-term debt issued by banks, businesses, and municipalities to finance day-to-day operations, to investors. These investors, after realizing that some of the vehicles that had been issuing commercial paper might also hold subprime assets, panicked and stopped purchasing commercial paper, especially at longer-dated maturities. The market for this kind of debt all but shut down, with many major corporations unable to borrow for longer than a day at a time from purchasers of commercial paper. Businesses were backed into a wall as banks were not lending and purchasers of commercial paper (institutional investors, financial institutions, and others) were not making funds available by buying commercial paper. The resulting severe credit contraction started to crimp working capital and investment outlay at small businesses and had wider effects on business activity through its impact on interest rates, exchange rates, and consumer loans. This feedback chain contributed to further layoffs and rising unemployment rates across the economy.

To help alleviate this freeze and prevent substantial disruptions to the economy, the Federal Reserve announced the creation of the Commercial Paper Funding Facility (CPFF), which would serve to complement the Federal Reserve’s existing credit facilities to help provide liquidity to term funding markets.\(^{300}\) By purchasing commercial paper, in effect, the Federal Reserve engaged itself in doing the lending that the private financial system would not or could not do. “The CPFF will provide a liquidity backstop to U.S. issuers of commercial paper through a special purpose vehicle (SPV) that will purchase three-month unsecured and asset-backed commercial paper directly from eligible issuers.”\(^{301}\) While these moves have increased the amount of taxpayer dollars at risk, it underscores the growing sense of urgency felt by policymakers in a climate where lending had virtually dried up. An improved commercial paper market is


\(^{301}\) See id.
designed to enhance the ability of financial intermediaries to accommodate the credit needs of businesses and households.

Severe redemption pressures since the financial crisis deepened in September 2008 also forced money market funds to raise cash by scaling back their short-term lending to banks and selling their commercial paper holdings, making it difficult for banks and companies to raise short-term funds. One of the safest and, lately, most attractive places for people to place some of their savings – the money market account – suddenly looked a little less secure thanks to fallout from the mortgage debacle. The money market funds confronted the same problems plaguing other corners of the financial market. The Reserve Primary Fund, a prominent fund, had placed some of its investors’ money into $785 million of bonds issued by Lehman Brothers – investment bets that looked much safer before Lehman entered into bankruptcy. These circumstances led to this firm’s net asset value to fall below par – “breaking the buck” – for only the second time in history, causing investors to begin to withdraw funds in large amounts from money market mutual funds that invested in private instruments such as commercial paper and certificates of deposit and forcing more sales and pushing values down even further.  

Further panicked withdrawals occurred as fund managers responded by liquidating assets and investing in only the shortest of maturities. This precipitated “a $200 billion net outflow of funds from that market.” As the pace of withdrawals increased, both the stability of the money market mutual fund industry and the functioning of the commercial paper market were threatened. As an additional intervention, the Federal Reserve indicated in late October 2008 that it would finance up to $540 billion in purchases of short-term debt from money market mutual funds. In early January 2009, the Federal Reserve announced two changes to the Money Market Investor Funding Facility (MMIFF). First,
eligibility to participate in the MMIFF was expanded from U.S. money market mutual funds to also encompass a number of other money market investors, including "U.S.-based securities-lending cash-collateral reinvestment funds, portfolios, accounts (securities lenders), and particular local government investment pools, common trust funds, and collective investment funds that function similar to money market funds." Second, the Federal Reserve adjusted "several of the MMIFF's economic parameters, including the minimum yield on assets eligible to be sold to the MMIFF," so that the program could remain a "viable source of backup liquidity for money market investors even at very low money market interest rates." In addition, the Federal Reserve and Treasury Department announced a substantial and aggressive lending program in late November 2008. The Term Asset-Backed Securities Loan Facility (TALF) is a $200 billion program designed to keep credit flowing freely from lenders to borrowers by lending money to private investors who purchase securities backed by student loans, auto loans, credit card debt, and small business loans guaranteed by the Small Business Administration. To encourage investors to start purchasing these securities backed by consumer debt or business loans, the Federal Reserve has agreed to lend money at attractive interest rates to them as well as provide an insurance policy should loans underlying those investments default. The Treasury will contribute $20 billion to TALF and assume responsibility for any losses up to $20 billion, while the Federal Reserve will lend no more than $180 billion. This marks the first time that the Treasury and Federal Reserve have intervened to


306. Id.
307. Id.
Senior officials at the Treasury Department and Federal Reserve remain confident that the rescue plan for U.S. banks and the greater economy will succeed in preventing a financial system meltdown and ensure that there will not be another Great Depression, but they know that a “sharp economic meltdown is already baked in the cake.” But, after two decades in which economic growth has been fueled by extraordinary surges of borrowed money, a new era of risk-avoidance appears at hand.

J. Rising Unemployment and the Escalating Fear of Layoffs

Rising unemployment threatens to deepen the housing slump, further depress mortgage debt, and increase delinquencies on auto loans, credit cards, and other consumer loans. Economic activity downshifted further in the wake of the deterioration in financial markets in September 2008. The job losses since the recession began totaled 2.59 million by mid-January 2009 – the most since 1945—with the majority of layoffs and downsizing occurring between September and December 2008 as consumers and businesses cut back drastically. With the economy deteriorating rapidly, the recession deepened even further during December 2008 as 524,000 additional jobs were slashed, causing the unemployment rate to reach its highest level in sixteen years. “Not since 1980 has the work force shrunk so much in just three months.” As of mid-January 2009, the number of unemployed Americans reached 11.1 million, a statistic almost fifty percent bigger than at the start of the recession. The effects of the financial crisis have spread well beyond Wall Street to other white-
collar jobs such as lawyers and architects, as well as construction, retail, and service jobs. The unemployment rate rose to 7.2% at the beginning of January 2009. Long-term unemployment is a worsening problem. Many Americans have been out of work for months and have resorted to lower-wage or part-time jobs to make ends meet. If those workers are included in the national labor statistics, the so-called total unemployment rate rose to 13.5% in January 2009, from just 8.7% at the start of the recession. This provides fresh evidence that the economic downturn accelerated even further at the end of 2008, promising to make the current recession, already in play since December 2007, the longest since the Great Depression as households and businesses struggle with the most financial stress they have faced in decades. The economy will likely lose several hundred thousand more jobs a month well into 2009, causing the unemployment rate, which was just five percent as recently as April 2008, to hit eight percent or even higher in the coming months.

VI. THE GENESIS OF THE “BAILOUT BILL”

A. Treasury Goes to Congress

Although the Federal Reserve saved A.I.G. with an emergency loan the day after Lehman Brothers collapsed, the credit markets around the world began freezing up anyway. “Investors were stampeding out of money market mutual funds. Credit markets were reeling, stocks were wobbling, and bank failures loomed.” It was at this point that then-Treasury Secretary Henry M. Paulson Jr., in consultation with Federal Reserve Chairman Ben S. Bernanke, decided that he had to find a systemic solution and stop jumping from crisis to crisis, fixing one company’s problems only to find several more right around the corner. Although Paulson had been resisting such a move for

317. See Uchitelle, supra note 312.
318. Id.
months, Bernanke suggested that it was time for the Treasury secretary to go to Congress to seek funds and authority for a broader rescue since the Federal Reserve had been stretched to its limits and could not act any more forcefully or aggressively to confront the financial crisis.

After continued signs of a dramatic slowdown, the federal government announced a plan on September 20, 2008, called the Troubled Asset Relief Program (TARP), to purchase large amounts of illiquid, risky mortgage-backed securities from financial institutions in order to restore the flow of necessary lending and curtail the skyrocketing home foreclosures. Initially, in late September, then-Secretary Paulson presented Congress with a 2 ½-page draft to request authority to purchase $700 billion worth of distressed assets, arguing that banks and other institutions were suffering from the distressed assets clogging their balance sheets. After a compromise was reached between Congressional leaders and the Bush administration, the much anticipated passage of the $700 billion bailout plan was initially struck down by the U.S. House of Representatives in a 228–205 vote on September 29, 2008. Following this vote, the Dow Jones dropped 778 points in a single day, its largest single-day point drop ever, causing a $1.2 trillion loss in market value.320

Given these circumstances, the U.S. Senate hastily added several sweeteners to the legislation, including a provision that temporarily raises federal insurance of bank accounts from $100,000 to $250,000 as a means to protect more Americans from any potential bank runs, and provided its support for the bill in a vote of 74-25 on October 1, 2008. Within a few days after the initial failed vote, Congress recognized the great threat frozen credit markets posed to Americans and the economy as a whole. On October 3, 2008, upon Congress’ passage of the Emergency Economic Stabilization Act of 2008 (EESA), President Bush signed the bill, which had morphed into a 113-page monster, into law.321

B. The Troubled Asset Relief Program (TARP) Reconsidered

But, even after Congress finally passed the bailout bill on October 3, 2008, financial markets remained in turmoil. The crisis began to spread to Europe and to emerging markets, with governments acting quickly to stabilize banks, broaden guarantees for deposits, and agree on a coordinated response. Banks in England and Europe had also invested heavily in mortgage-backed securities offered by Wall Street. Losses from those investments and the effect of the same tightening credit spiral being felt on Wall Street put a growing number of European institutions in danger. The Dow Jones Index dropped further when markets resumed trading during the week following the passage of the bailout bill as stocks tumbled to record lows, ending one of the worst weeks in the stock market since September 11, 2001. As the financial markets spiraled further downward, a growing number of top-tier financial institutions, including Goldman Sachs and Morgan Stanley, became worried about their survival. As the credit markets seized up and all but stopped functioning, many companies found it impossible to borrow money on more than an overnight basis. Bank stocks plummeted, making it much more difficult to shore up their balance sheets by raising more capital from investors. In this midst, the Treasury began “soliciting feedback about capital injections from Wall Street executives, hedge fund managers, and other” investors. And after a week in which stocks declined almost twenty percent on Wall Street and a meeting of the “Group of 7” countries—the United States, Britain, Germany, France, Italy, Canada, and Japan—European and American officials announced coordinated actions that included taking equity stakes in major banks, including $250 billion in initial investments in the United States. The government’s equity stakes in banks and bank holding companies involve the purchase of preferred stock, which carries a significant required dividend.

324. See id.
In some ways, it mirrors long-term debt. Such actions here in the United States intertwine the banking sector with the federal government for years to come and give American taxpayers a direct stake in the future of American banking and finance, including any possible losses, however significant they may be.

The decision to take equity positions in U.S. banks also represented a dramatic shift in the original purpose of the $700 billion financial rescue plan passed by Congress, as most had expected the government to use the money primarily to purchase troubled assets from financial institutions. \footnote{See, e.g., Henry M. Paulson Jr., Fighting the Financial Crisis, One Challenge at a Time, N.Y. TIMES, Nov. 18, 2008, at A27 (stating that Treasury's initial intent “was to strengthen the banking system by purchasing illiquid mortgages and mortgage-related securities”); Mark Gongloff, Bailout Recipe Should Include a Grain of Salt, WALL ST. J., Nov. 14, 2008, at C1 (noting that Secretary Paulson marketed TARP as a “clearinghouse for toxic credit assets such as mortgage-backed securities”).}

“But, during the two weeks that Congress considered the financial rescue legislation, market conditions worsened considerably. By the time the bill was signed on October 3, 2008, [then-] Secretary Paulson believed that the federal government needed to act quickly and forcefully, and that purchasing troubled assets – the initial focus – would take time to implement and would not be sufficient given the magnitude of the downturn.”\footnote{See Henry M. Paulson, Jr., Sec'y, U.S. Dep’t of the Treasury, Remarks on Financial Rescue Package and Economic Update (Nov. 12, 2008), available at http://www.ustreas.gov/press/releases/hp1265.htm.}

The process of figuring out how to purchase assets has proved tricky, in large part because it is difficult to determine how to price such assets, many of which are backed by risky mortgages and carry depressed values. Purchasing them at market prices would further hurt banks, since the firms would have to write-down the value of those assets. But, paying above-market prices could hurt taxpayers if the assets never recover in price. Nonetheless, Tim Ryan, president of the Securities Industry and Financial Markets Association and the former head of the Resolution Trust Corporation which worked to resolve the Savings and Loan Crisis in the 1980s, believes that plans for the U.S. government to purchase troubled assets as part of its financial rescue package should not be delayed or abandoned. \footnote{See Krishna Guha, Buying of US toxic assets urged, ’FIN. TIMES, Nov. 10, 2008.}

Ryan is a “big believer in government establishing
the market clearing price for these assets because nobody else is doing it."328 Ryan originally thought that the government would purchase assets to establish prices and determine the size of the hole in banks’ balance sheets before trying to fill that hole with new capital, since institutions holding illiquid assets still do not know how large their losses may be.329 According to this line of thinking, as long as banks remain unsure about their asset valuations, capital injections would have, at best, a limited impact on their desire to extend credit.330 The continued presence of these distressed assets leads to increased “uncertainty about the underlying value of these institutions and [inhibits] both new private investment and new lending.”331 As the financial crisis continues, there is increasing fear of corporate bankruptcies that will both strain banks’ balance sheets and make them even more hesitant to make loans that could help keep struggling companies alive.

Then-Treasury Secretary Paulson announced in mid-November 2008 that the Treasury has placed on hold its plan to purchase illiquid mortgage-related assets—the original intention of the $700 billion rescue plan.332 Instead, Treasury continued focusing its efforts on injecting capital directly into the financial sector. In detailing the next phase of Treasury’s Troubled Asset Relief Program (TARP), Treasury has considered a proposal to require that firms seeking future government capital assistance raise private capital in order to qualify for public assistance, according to people familiar with the matter.333 Additionally, a new set of guidelines issued in mid-November 2008 by the Federal Reserve and other federal banking regulators called for every banking organization to “ensure the adequacy of its capital base, engage in appropriate loss mitigation strategies and foreclosure

328. Id.
329. See id.
330. See id.
332. Paulson, supra note 326.
333. See id.
prevention, and reassess the incentive implications of its compensation policies” in order to strengthen the capital base of the financial system and restore liquidity to credit markets.\textsuperscript{334} These policy changes are designed to address the critical issue of making sure that banks continue to lend at adequate levels by making new capital widely available to U.S. financial institutions, broadening and increasing the guarantees on bank deposit accounts and certain liabilities, and providing backup liquidity to U.S. banking organizations.\textsuperscript{335}

Notwithstanding trillions of dollars of taxpayer infusions from the federal government and other governmental interventions, credit is still not flowing at the level many had desired or anticipated. Because banks are playing defensively, they are doing whatever they can to protect their assets, causing them to not want to produce any new loans. “While banking regulators are urging banks to issue loans, they are also requiring that they reduce the amount of money they seek to borrow.”\textsuperscript{336} Bank holdings of cash nearly tripled to a little over $1 trillion between October and December 2008, according to Federal Reserve data.\textsuperscript{337} Credit card lenders are adjusting to a new regulatory landscape which, the industry argues, will restrict credit at a time when consumers are in dire need of just that.\textsuperscript{338} In the capital markets, bond investors have abandoned all but the least risky of investments, and the rush to purchase conservative U.S. Treasury securities has pushed the yields on these investments to historic lows.\textsuperscript{339} Investors and bankers will remain wary of extending credit until the housing market stabilizes and until job layoffs start to slow as more people find jobs and get back to work, for “[i]n a struggling economy, even a seemingly solid loan can

\textsuperscript{335}. Id.
\textsuperscript{337}. See id.
\textsuperscript{338}. Id.
\textsuperscript{339}. Id.
turn bad quickly. When the credit markets regain stability, bankers hope investors will start purchasing other types of debt, helping to unfreeze credit flows. As a move designed to help boost lending and jumpstart the economy, the FDIC in mid-January 2009 announced plans to expand its Temporary Liquidity Guarantee Program, its debt-guarantee program, to back debt with maturities of up to ten years (previously, the FDIC backed debt with maturities no more than three-years), provided that the debt is backed by collateral and will help support new consumer lending.

The worsening of economic growth prospects, the continuation of credit losses and asset markdowns, and the significant quantity of distressed, difficult-to-value mortgage assets on institutions’ balance sheets create the strong possibility that more capital injections and guarantees may be needed to ensure stability and the normalization of credit markets, even if the Obama administration passes its much anticipated economic stimulus package. Many institutions, including Citigroup, JPMorgan Chase, Bank of America, and Wells Fargo, each expect further substantial losses as their finances keep deteriorating as the economy continues to weaken. Additional losses were expected to pile up even further from loans made to commercial real estate developers, small businesses, and highly leveraged corporate buyouts, as well as from consumers who continue to default on

340. Id.
341. Id.
344. See, e.g., Michael J. de la Merced & Eric Dash, JPMorgan Reports Slim Profit in Tough Quarter, N.Y. TIMES, Jan. 15, 2009, http://www.nytimes.com/2009/01/16/business/16bank.html?_r=1&ref=business (noting that JPMorgan Chase, which reported a $702 million profit for its 2008 fourth quarter (far short of the nearly $3 billion it earned for the same quarter in 2007), posted more than $2.8 billion in losses on a range of business, from trading and corporate lending to credit card and mortgage lending).
their mortgages, credit cards, and auto loans. Bank of America, which had already received $25 billion in TARP funds, entered into discussions with the Treasury Department in mid-December 2008 after it notified the Treasury Department that it was unlikely to complete its acquisition of Merrill Lynch, concerned that its capital base could not support Merrill’s troubled assets as a result of Merrill’s larger-than-anticipated losses in the fourth quarter related to CDOs, subprime MBSs, commercial real estate, and other credit assets. The Treasury Department, concerned about the consequences of the deal’s failure on U.S. financial markets and global economic stability, agreed to commit $20 billion in additional capital to Bank America in exchange for Bank of America’s acquisition of Merrill Lynch — a plan announced with the release of Bank of America’s fourth quarter earnings report (a loss of $1.79 billion) on January 16, 2009. In addition to the capital injection, the Treasury Department, Federal Reserve, and FDIC were working on an asset-guarantee plan patterned after the Citigroup rescue. Under the terms, the Treasury Department and FDIC will also backstop most future losses from a pool of $118 billion in troubled assets, including residential and commercial real estate and corporate loans, which will remain on the bank’s balance sheet. In exchange, Bank of America will provide the federal government with an additional $4 billion stake in preferred stock.

The landscape of our nation’s economy has been radically reshaped by the federal government in a very short period and in a seemingly ad hoc manner, as then-Treasury Secretary Paulson suggested on several occasions that there is “no playbook” for...
dealing with the current financial crisis. Now, after spending hundreds of billions more to prop up, bail out, and wind down a multitude of institutions, the U.S. government effectively runs, supports, or outright owns vast portions of the financial sector. Senior government officials have consistently reassured both Congress and the American public that these measures should help rebuild confidence in the financial system, increase the liquidity of financial markets, and improve the ability of financial institutions to raise capital from private sources. To prove the truth of the phrase "time is of the essence," then-Treasury Secretary Paulson stated that only now that the bailout bill has been enacted into law does the federal government have the authority to intervene in a nonbank failure in cases of firms that lack adequate collateral, as was the case with Lehman Brothers.

C. Help! Growing Calls for Governmental Assistance

The U.S. government's financial system rescue plans have come under increasing pressure as a growing array of distressed companies have signaled the need for financial assistance. As another illustration of the stress on financial services companies, American Express Co. won swift approval from the Federal Reserve in early November 2008 to become a bank holding company, helping the credit card company gain access to some of the $700 billion in federal TARP funds being injected into financial firms. The structural switch shows how financial services firms that have long relied on the capital markets are acting quickly and forcefully to shore up their funding sources as the credit crisis drags on and economic turmoil spreads around the globe. General Motors Corp., which lobbied heavily for government financial aid, indicated that it might violate the terms

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352. See Nocera & Andrews, supra note 248.
of some of its debt and even face bankruptcy if it cannot regain a steady financial footing. While Congress refused to open TARP funds to U.S. automakers, the Bush administration, as one of its parting gifts, granted an emergency bailout of General Motors and Chrysler in mid-December 2008.\textsuperscript{354} While the plan provided $13.4 billion by mid-January 2009 into the companies from TARP funds, the two companies have until March 31, 2009 to produce a plan for long-term profitability, including concessions from unions, creditors, suppliers and dealers.\textsuperscript{355} In February 2009, another $4 billion was scheduled to be made available for General Motors if the rest of the $700 billion bailout package had been released by Congress.\textsuperscript{356} Mortgage giants Fannie Mae and Freddie Mac posted losses of $29 billion and $25.3 billion, respectively, in the third quarter of 2008. While Fannie Mae indicated that it would likely ask for a cash infusion from the Treasury Department’s special $200 billion pool set aside back in September to aid the companies before 2008 came to a close, Freddie Mac had in fact asked for an initial injection of $13.8 billion in government assistance.

About a week before Obama assumed the presidency, he requested that President Bush ask Congress to release the remaining $350 billion TARP funds, on his behalf. On January 15, 2009, the U.S. Senate voted to release the TARP fund’s remaining $350 billion to the Treasury Department, in a close vote (58 to 42) that provided a clear indication of lawmakers’ deep uncertainty about the program. While members of the U.S. House of Representatives seemed to be even more skeptical of the release of the remaining TARP funds, under the original TARP legislation, only one chamber’s support was required in order for the Treasury to access the funds.\textsuperscript{357} President Obama and his


\textsuperscript{355} See id.

\textsuperscript{356} See id.

\textsuperscript{357} See H.R. 1424, 110th Cong. § 115(c) (2008). Unless Congress passes a joint resolution rejecting the request within fifteen days after receipt, the Treasury Department can begin to tap the funds. If Congress turns down the request, the president could veto the resolution and then the Treasury Department could proceed. The money would then be blocked only if Congress overrides the veto, which would require a two-thirds majority in both chambers. Given that the Senate offered its vote of approval, even if the House of Representatives voted to reject the
leading economic advisers assured Congress that they would use a substantial portion of the second half of the TARP funds to help distressed homeowners refinance mortgages and escape foreclosure.\(^{358}\) With the release of the second half of the TARP funds, it seems that President Obama managed to avoid a dramatic showdown over the specifics on how the money will be disbursed, given the continued unraveling of different sectors of the economy and congressional criticism of federal bailout efforts under the outgoing Bush administration. Government officials and policymakers were also looking at reviving the original idea of TARP — to have Treasury buy up distressed mortgage-related assets from financial entities.\(^{359}\) Federal Reserve Chairman Ben S. Bernanke, however, sharply warned President Obama and Congressional leaders that the second half of the TARP funds — and possibly more — needs to be dedicated to recapitalizing banks so that they can resume lending at normal levels.\(^{360}\)

**D. Third Time the Charm? The Rescue of Citigroup**

Despite the passage of the monstrous $700 billion bailout bill, the financial crisis appeared to be entering another treacherous phase by late November 2008. While federal government regulators had developed two sweeping plans to bail out banking institutions earlier in 2008, investors remained skeptical after both occasions. In fact, the $25 billion that the federal government invested in Citigroup this fall through TARP funds did not appear sufficient to stabilize it. Citigroup, once the nation’s largest financial institution, faced over $65 billion in losses, write-downs for troubled assets, and charges to account for future additional losses, with over half of that amount a result of plummeting mortgage-related securities.\(^{361}\) Citigroup suffered four

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\(^{358}\) See Andrews & Dash, *supra* note 345 (noting that Lawrence H. Summers, head of the White House National Economic Council, reiterated that the Obama administration would use some of the funds to help reduce foreclosures).

\(^{359}\) See Bernanke, *supra* note 331; *Hearing 9, supra* note 343 (testimony of Donald L. Kohn, Vice Chairman, Bd. of Governors, U.S. Fed. Reserve Sys.).

\(^{360}\) See Bernanke, *supra* note 331.

\(^{361}\) See Dash & Creswell, *supra* note 213.
consecutive quarters of multibillion-dollar losses after writing down billions of dollars of mortgage-related investments.\textsuperscript{362} Citigroup hoped to be able to unload some of those troubled mortgage-related assets to the U.S. government through its Troubled Asset Relief Program, until then-Treasury Secretary Paulson effectively withdrew plans to use TARP funds to purchase banks' bad assets.\textsuperscript{363} Accordingly, Citigroup went ahead and announced plans to sell about $80 billion in risky assets and purchase $17.4 billion in assets from its structured-investment vehicles – including risky mortgage-related securities – and faced a $1.1 billion loss because of their sharply reduced values.\textsuperscript{364} As a result of these factors, Citigroup’s market capitalization valuation fell to $20.5 billion on Friday, November 21, 2008, a sharp decline from its $244 billion value just two years ago, and still retained $20 billion of mortgage-related securities on its books, most of which have been marked down to between 21 and 41 cents on the dollar.\textsuperscript{365} The plunge in the company’s stock price threatened the viability of other financial institutions since Citigroup retained more than $2 trillion in assets and operations in over one hundred countries.\textsuperscript{366}

Only a matter of days after then-Treasury Secretary Paulson indicated that the government bailouts had stabilized the most important financial institutions, Citigroup’s plunging stock prices forced the federal government to intervene once again. Under the agreement reached in late November 2008, Citigroup and government regulators will back up to $306 billion of largely residential and commercial real estate loans and other assets, which will remain on the bank’s balance sheet.\textsuperscript{367} Citigroup will

\textsuperscript{362} See id.
\textsuperscript{364} See id.
\textsuperscript{365} See Dash & Creswell, supra note 213.
shoulder losses on the first $29 billion of that portfolio. The government will also inject an additional $20 billion into Citigroup, in addition to the $25 billion it invested a few weeks ago through TARP funds. Any remaining losses will be split between Citigroup and the government, with the bank absorbing ten percent and the government absorbing ninety percent. Under the plan, the government would virtually insure a portion of Citigroup’s balance sheet, meaning that taxpayers will be responsible if Citigroup’s large portfolios of mortgage, credit cards, commercial real estate, and large corporate loans continue to weaken. This second bailout effort by the federal government placed Citigroup under open bank assistance, “which involves a loss-sharing arrangement devised by the [FDIC] and an investment by the Treasury typically reserved for deeply troubled institutions.” This new bailout program suggests yet another phase in government efforts to stabilize the economy and financial markets, as senior government officials now seem “willing to help shoulder bad assets, on a targeted basis, from specific institutions.”

By early 2009, Citigroup, which had already received a $45 billion bailout package from the Treasury, remained in extremely dire straits. Investors and regulators from the Federal Reserve and Office of the Comptroller of the Currency pushed it to downsize in the face of its fifth straight quarter of losses, with a fourth quarter 2008 operating loss of $8.29 billion and a total yearly loss for 2008 of $18.72 billion. The company announced that it will reorganize into two business lines focused on banking (Citcorp) and other asset management and consumer financial services (Citi Holdings), and will combine its Smith Barney brokerage unit with Morgan Stanley’s brokers, establishing the

370. See Term Sheet, supra note 368.
372. Enrich et al., supra note 363.
373. See Dash, supra note 371.
world’s largest brokerage. While the company will focus its attention on its strongest remaining businesses, it plans to close some of its money-losing business operations, including its consumer finance operations, private-label credit card businesses, Primerica insurance unit, proprietary trading, alternative investment division, and sell its overseas brokerage and asset management units. The newly announced strategy represents the abandonment of the acquisition-fueled growth strategy that built Citigroup into a “one-stop shop” in 1998 with the merger of Travelers Group, the insurance company, and Citicorp, the nation’s largest bank at the time, that brought together banking, insurance, and underwriting operations. It also stands as a glaring example of how the banking system is in dire need of even more monetary assistance.

VII. RESTORING THE ECONOMY AND STRENGTHENING FINANCIAL MARKETS

A. Efforts to Stimulate Economic Growth and Prevent Further Deterioration

In an interview on NBC’s “Meet the Press” aired on December 7, 2008, then-President-elect Barack Obama indicated that the economy seems destined to get worse before it gets better but pledged a recovery plan” that is equal to the task ahead.” In early December, Obama, whose economic advisers were already hard at work on an economic recovery package, announced that he intends to revive the economy through a job-creating public works program of a scope not seen since the development of the interstate highway system in the 1950s. Such measures, along with proposed tax cuts and increased commitments to social benefit programs such as unemployment insurance, Medicaid, and an education stabilization fund to avoid cut backs in teachers and classroom programs, are an integral part of his vision for a massive economic recovery plan. Continued dismal employment reports

374. See id.; David Enrich, Citi Logs $8.3 Billion Loss, Outlines Split, WALL ST. J., Jan 17, 2009, at B3.
375. See Dash, supra note 371.
376. See Dash, supra note 371.
increased the likelihood that Congress will approve such an economic recovery package, a two-year economic stimulus that has grown to approximately $800 billion. The deepening financial crisis has demonstrated that stabilizing our financial system will require not only strengthening our financial institutions so they are able to lend to our communities, but also helping homeowners avoid preventable foreclosures. Regrettably, there are many American families in these dire circumstances. The housing crisis continues to provide enormous challenges for America, especially given that there is no “silver bullet” solution. As an additional piece of his short-term economic agenda, President Obama has also advocated an effort to stem the rising tide of foreclosures, likely led by the FDIC, which pressed the outgoing Bush administration for months to approve such a plan.

The outgoing Bush administration urged lenders to ease the burden of struggling U.S. homeowners and avoid taking over thousands of homes. As part of a deal with several state attorneys general to resolve claims against Countrywide, the mortgage lender acquired by Bank of America earlier this year, Bank of America is working to modify troubled mortgages for almost 400,000 borrowers with home loans from Countrywide. In mid-January 2009, the bank reiterated that it is in the process of working to prevent hundreds of thousands of mortgage borrowers from entering into foreclosure, and hopes to keep 630,000 homeowners in their homes.377 The FDIC has reached out to financially strapped borrowers whose mortgages were serviced by IndyMac Bank. Wachovia initiated a loan-refinancing program before agreeing to its pending takeover by Wells Fargo. JPMorgan Chase, with a mortgage modification plan that has already prevented over 300,000 foreclosures, has indicated that it plans to amend and expand its program by helping another 300,000 families remain in their homes with mortgage modifications over the next two years and not placing any loans into foreclosure.378 Citigroup has offered to modify the terms of as much as $20 billion


in mortgages for borrowers who are current on their loan payments but at risk of falling behind. Fannie Mae, Freddie Mac, and U.S. officials also announced plans to speed up the modification of hundreds of thousands of loans held by the housing finance giants, marking the latest effort to try and prevent more foreclosures. Yet while this plan could cause lower monthly payments for several hundred thousand homeowners, "it would have virtually no impact on the millions of people who took out expensive subprime loans and who are at the heart of the nation's foreclosure crisis." As a result, Barney Frank (D-MA), chairman of the House Financial Services Committee, would like to see more TARP funds used to help homeowners. The Obama administration is still discussing a range of other, more extensive options to help homeowners.

While such measures will help keep some borrowers in their homes, they will not be enough to stem the rising tide of foreclosures, according to Mark Zandi, chief economist of Moody's Economy.com. "The foreclosure crisis is now much too large to be sufficiently addressed by mortgage servicers and owners," he said. "The federal government will need to come forward with a very large and comprehensive foreclosure-mitigation plan." Across the United States, 8.5 million homeowners are expected to default on their mortgages between 2008 and 2010, with some 5.2 million of them expected to lose their homes. However, finding troubled homeowners, modifying their mortgages, and keeping them in their homes is easier said than done. It is much more difficult to restructure mortgages bundled and packaged into securities that now are owned by investors with divergent interests. Financial executives have competing views on whether mortgages that were securitized can be modified since

380. See id.
382. Id.
383. Id.
384. See id.
they are not owned by the banks that serviced them, but instead by numerous investors. Some contracts underlying securitizations expressly prohibit any modifications to the underlying mortgages, and some industry experts are inclined to believe that investors may sue any banks that change mortgages. For instance, some securitization agreements limit the percentage of loans modified to between five and ten percent of the original value of all outstanding loans while others require the consent of the ratings agency, the bond insurer, and guarantors or entities providing credit enhancement before restructuring.

Government officials have also come under increasing pressure to address falling home prices and rising foreclosures, which underpin the financial crisis. Federal Reserve Chairman Ben S. Bernanke has urged the federal government to consider sweeping steps to prevent foreclosures, including buying risky mortgages and refinancing them under more favorable terms to homeowners. In a new federal government initiative aimed at pushing down home mortgage rates announced in November 2008, the Federal Reserve will purchase $600 billion of mortgage-backed securities guaranteed by Fannie Mae and Freddie Mac, and other government-controlled financing entities. With increased demand for both debt-and mortgage-backed securities, the value of those investments should rise, helping to lower both their yields and mortgage rates. This program, coupled with other recent federal government initiatives discussed above, demonstrates that the federal government will print as much money as necessary in order to rehabilitate the nation's banking system, lending,

386. See id.
387. See id.
388. See Brescia, supra note 38, at 299 (noting that because most securitization conduits are created as Real Estate Mortgage Investment Conduits (REMICs), such entities are then excluded from taxation but in order to qualify for such tax benefits, the loan pool must remain static and loan modifications can only be conducted if default under the loan is reasonably foreseeable; no modifications can occur in anticipation of default).
consumer spending, home buying, and investment. The Treasury Department is also considering a plan to revitalize the U.S. housing market that would lower interest rates for home mortgage loans. The plan, still in the early stages, would use the clout of Fannie Mae and Freddie Mac on a temporary basis to encourage banks to issue new mortgages at rates as low as 4.5% by having Treasury purchase securities underpinning the loans at a price equivalent to that rate. Treasury believes that this plan could halt the persistent slide in housing prices by enabling borrowers to afford larger loans, thus increasing demand and pushing up home values. The lower interest rates would only be available to borrowers who are purchasing a home and not for refinancing purposes. Christopher Mayer, a professor at Columbia University's Business School, estimates that this plan could quickly help 1.5 million to 2.5 million people purchase homes, providing a significant boost to the housing market and greater economy. While the government would serve as the guaranteed buyer, banks and financial institutions could also benefit by generating fees for procuring loans to home buyers able to afford homes at the new lower rates. Such measures could further boost the economy and improve the market for other consumer loans that have weighed heavily on the banking industry.

B. Lax Regulation and the Realities of a New Finance Regulatory Landscape

As a result of this financial crisis, an expansion of the government's role in financial markets is certain. The housing correction has exposed alarming shortcomings in the outdated U.S. regulatory system. Our financial system was undermined not only by greed and other bad behavior, but by an utter lack of checks and balances to curb such destructive forces. For one, a lingering question remains why banking regulators failed to respond more quickly to curb the growth in risky home loans to

391. See id.
392. See id.
people with weak credit. As Senator Christopher Dodd (D-CT), chairman of the Senate Committee on Banking, Housing, and Urban Affairs, has said, "[i]t seems quite apparent that the regulators were asleep at the switch." Other recent events in the financial sector, including the Bernard Madoff $50 billion fraud scandal, have indicated that regulatory agencies such as the SEC have been negligent in taking care of some of their most critical regulatory responsibilities.

In the longer term, it is clear that our current economic circumstances demand that we rethink, reform, and modernize supervision of the financial services industry. In September 2008, President Bush stated that “[o]nce this crisis is resolved, there will be time to update our financial regulatory structures. Our 21st century global economy remains regulated largely by outdated 20th century laws. Recently, we’ve seen how one company can grow so large that its failure jeopardizes the entire financial system.” According to Charles L. Evans, the president of the Federal Reserve Bank of Chicago, the financial crisis has revealed “significant weaknesses” in the U.S. regulatory system that must be addressed on multiple levels as the current “patchwork of regulatory authorities failed to curb excessive risk-taking or detect systemic vulnerabilities.” Indeed, even then-Treasury Secretary Paulson acknowledged in early 2008 that our current regulatory structure was not built to address the modern financial system with its broad array of market participants, innovation and ingenuity, complexity of financial instruments and financial engineering, convergence of financial intermediaries and trading platforms, and global integration of financial institutions, investors, and markets. Moreover, our financial services companies have

become substantially larger, more complex, and more difficult to supervise and manage. In our current regulatory scheme, we have five federal deposit institution regulators in addition to state-based supervision, we bifurcate securities and futures regulation, and insurance regulation, one of the largest financial services industries, is almost entirely conducted at the state level.\textsuperscript{397} While the Gramm-Leach-Bliley Act of 1999, the last comprehensive financial regulatory overhaul in the United States, made substantial and important changes to our financial regulatory structure by allowing broader affiliations of financial services firms, it has also maintained separate and distinct regulatory agencies across the traditional securities, futures, insurance, and banking industry segments.\textsuperscript{398} This regulatory structure is not only at odds with the “increasing convergence of financial service providers and products,” but it can allow significant regulatory matters, such as the various financial innovations which precipitated the financial crisis, to “fall through the cracks.”\textsuperscript{399}

In March 2008, then-Treasury Secretary Paulson also laid out a “Blueprint for a Modernized Financial Regulatory Structure,”\textsuperscript{400} in which he recommended a United States regulatory model based on objectives that more closely link the regulatory structure to the reasons why regulation exists in the first place. His model proposes three primary regulators: one focused on market stability across the entire financial sector, another focused on the safety and soundness of institutions supported by a federal guarantee, and a third focused on protecting consumers and investors.\textsuperscript{401} While Americans have come to expect the Federal Reserve to step in to avert events that pose unacceptable systemic risk, it does not have the clear statutory authority or the mandate

\begin{footnotes}
\item 397. See id.
\item 398. See id.
\item 399. See id.; Bernanke, supra note 331 (stating that “[w]e need stronger supervisory and regulatory systems under which gaps and unnecessary duplication in coverage are eliminated, lines of supervisory authority and responsibility are clarified, and oversight powers are adequate to curb excessive leverage and risk-taking”).
\item 401. See id.
\end{footnotes}
to do this. Therefore, Paulson emphasized that we should consider how to most appropriately give the Federal Reserve the authority to access necessary information from complex financial institutions—commercial banks, investment banks, hedge funds, or other types of financial institutions—and the tools needed to intervene to mitigate systemic risk in advance of a crisis.

Since then—Secretary Paulson and the Treasury Department released the Blueprint, the collapse of a number of storied investment banks and financial institutions and the market turmoil more generally have placed in stark relief the outdated nature of our financial regulatory system. The financial crisis has indicated, with much drama, that this nation must move very quickly to update its regulatory structure and improve both market oversight and market discipline. President Barack Obama and senior Congressional leaders including Senator Christopher J. Dodd (D-CT), the Senate Banking Committee chairman, and Representative Barney Frank (D-MA), the House Financial Services Committee chairman, have indicated that they would go even further than the proposals issued by the outgoing Bush administration. Among their objectives, they seek to overhaul and consolidate the current financial system, including a possible merger of the SEC and the CFTC, in order to eliminate overlapping regulatory agencies, give other agencies new powers, expand financial oversight beyond the banking industry, and create a new overseer for the overall system.

403. See id.
404. During her confirmation hearing before the Senate banking panel on January 13, 2009, Mary L. Schapiro, President Barack Obama's choice to lead the Securities and Exchange Commission, noted that “[t]here are many reasons for this crisis—and one of them is that our regulatory system has not kept pace with the markets and the needs of investors. It is precisely during times like that that we need [the SEC to be] the investor’s advocate—that has the staff, the will and the resources necessary to move with great urgency to bring transparency and accountability to all corners of the marketplace, to vigorously prosecute those who have broken the law and cheated investors, and to modernize our country’s regulatory system to match the realities of today’s global, interdependent markets.” Statement of Securities and Exchange Commission Chairman-Designate Mary Schapiro (Jan. 13, 2009), available at http://banking.senate.gov/public/_files/SchapiroFINALtestimony11509.pdf.
Financial institutions are also likely to face tougher rules on maintaining capital reserves and liquidity. Unregulated companies and instruments such as derivatives, hedge funds, mortgage brokers, and credit rating agencies — all implicated in the current crisis — might be brought under the government's thumb. As the crisis on Wall Street, and Main Street, has deepened, Representative Frank believes that our nation needs new regulations that take into account, for instance, the enormous rise in lending — largely unregulated — that takes place outside the banking system, and that can better monitor the huge risks many Wall Street firms now take in the course of doing business. Representative Frank has also proposed ambitious ideas, including the creation of "a financial services system risk regulator," with the power "to assess risk across financial markets regardless of corporate form and to intervene when appropriate" such as mandating leverage reductions or capital requirement increases. Representative Frank predicts that 2009 will be the "best year" in terms of public policy since the New Deal era. Mr. Frank has also said that Congress' short-term goals include passing a regulatory overhaul comparable in scope to the development of the antitrust laws of the late nineteenth century and the creation of the SEC during the New Deal, with the overall objective to reduce excessive risk-taking within the general contexts of investor and consumer protections and mortgage lending.

C. Efforts to Strengthen Global Coordination

International leaders recently attended an emergency summit meeting held in Washington, D.C. to discuss coordinated actions to deal with the financial crisis. The leaders of these twenty countries, the "G-20," agreed to work more closely to reinvigorate their economies but put on hold the complex
questions of how to overhaul and financial regulation and coordinate international actions until they hold their next economic summit in April 2009. The G-20 members pledged new efforts to strengthen supervision of banks and credit rating agencies, scrutinize executive pay, and increase regulation of complex derivatives, a significant factor in recent market turmoil.

VIII. CONCLUSION

We have not seen a period as wrenching as this in many a decade. The many events of this financial crisis provide a superb illustration of how the U.S. financial system has had to digest a tremendous amount of direct blows in just a few months' time. Hundreds of years of investment banking history had weathered the chaos of stock market crashes, the Great Depression, two world wars and several domestic recessions and international currency crises. Yet, it took a made-in-America mortgage market implosion to dismantle three of the five most distinguished independent investment banks — Lehman Brothers, Merrill Lynch, and Bear Stearns — in just six months.

The financial crisis will likely take many months to dissipate. The excesses in our society built up over many years, and it will take time and patience to work through the unwinding of tremendous amounts of leveraging by consumers and companies. The road ahead for the U.S. economy and the global economy is full of challenges. Given the financial damage to date, a significant rise in layoffs and unemployment coupled with reduced consumer spending seem inevitable. While leading experts assure that this crisis will pass and that the United States will end up with a "far sounder financial system" as a result, it will not come quickly. A necessary condition for this crisis to end is a

411. See id.
stabilization of home prices in the United States, which many economists predict might come as early as mid- or late 2009.\textsuperscript{413}

As the days and weeks pass and the economic crisis deepens, consumers’ options are constrained, causing their personal version of the American dream to disappear. Most of us know people who were laid off and are looking for work, who are worried because the financial crisis has afflicted their personal savings, and who are worried that sometime soon, they will be joining the unemployment lines. It is easy to despair, but remember that financial markets are cyclical — financial turmoil seems to occur every five to ten years — and that “the bigger the binge, the worse the hangover.”\textsuperscript{414} The current financial crisis should be recognized as a necessary but painful market correction following the huge increase in the U.S. mortgage origination volume from 2001 to 2004.\textsuperscript{415} As terrible as this financial crisis has been for many people, it serves as a counterweight to the era of easy credit, over-indulgence, and over-leveraging.\textsuperscript{416} Despite the doom and gloom of a prolonged recession, the majority of Americans are optimistic about what is in store for 2009.\textsuperscript{417} Americans look to a new president — who has made putting people back to work and getting the economy moving again his top priority — and themselves, to chart a better year than the one passed.

Things will turn around and the market will come back to normal after confidence is restored to the financial system and investment capital can be convinced that it is safe to lay down the cash once again. Perhaps confidence and credit will return when Wall Street starts to forget the traumatic events of 2008. Hopefully, in the not too distant future, we will be able to look back on what is going on now and remember it is a blip on the horizon. Perhaps by then, we will have learned some critical but fundamental lessons: if we learn to live within our means, our

\textsuperscript{414} See Fletcher, supra note 413.
\textsuperscript{415} See Hirsch, supra note 28, at 44.
\textsuperscript{416} See Fletcher, supra note 413.
society will be much healthier and happier in the long run. In addition, \"[j]ust because someone is offering to loan you money doesn't mean you should take it;\" \"[d]on't assume lenders and regulators will look after your interests; and \"[b]efore you sign a contract, read the fine print.\"\textsuperscript{418} Perhaps most importantly, we can hope that the worst of the financial crisis is over, because a new year is, if nothing else, a new beginning and one step closer to economic normalcy and brighter days ahead.

\textsuperscript{418} See Fletcher, \textit{supra} note 413.