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Enhancing Investor Protection and the Regulation of Securities Markets

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"ENHANCING INVESTOR PROTECTION AND THE REGULATION OF SECURITIES MARKETS"

"When the music stops, in terms of liquidity, things will get complicated. <u>But as long as the music is playing, you've got to get up and dance.</u> We're still dancing."

Charles Prince, CEO of Citigroup
Financial Times, July 2007

Chairman Dodd, Ranking Member Shelby, and Fellow Senators:

I am pleased and honored to be invited to testify here today. Because I have been asked to address a number of questions, I set forth a table of contents below to assist the reader:

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Introduction

We are rapidly approaching the first anniversary of the March 17, 2008 insolvency of Bear Stearns, the first of a series of epic financial collapses that have ushered in, at the least, a major recession. Let me take you back just one year ago when, on this date in 2008, the U.S. had five major investment banks that were independent of commercial banks and were thus primarily subject to the regulation of the Securities and Exchange Commission: Goldman Sachs, Merrill Lynch, Morgan Stanley, Lehman Brothers, and Bear Stearns. Today, one (Lehman) is insolvent; two (Merrill Lynch and Bear Stearns) were acquired on the brink of insolvency by commercial banks, with the Federal Reserve pushing the acquiring banks into hastily arranged "shotgun" marriages; and the remaining two (Goldman and Morgan Stanley) have converted into bank holding companies that are primarily regulated by the Federal Reserve. The only surviving investment banks not owned by larger commercial banks are relatively small boutiques (e.g., Lazard Freres). Given the total collapse of an entire class of institutions that were once envied globally for their entrepreneurial skill and creativity, the questions virtually ask themselves: Who failed? What went wrong?

Although there are a host of candidates – the investment banks, themselves, mortgage loan originators, credit-rating agencies, the technology of asset-backed securitizations, unregulated trading in exotic new instruments (such as credit default swaps), etc. – this question is most pertinently asked of the SEC. Where did it err? In overview, 2008 witnessed two closely connected debacles: (1) the failure of a new financial technology (asset-backed securitizations), which grew exponentially until, after 2002, annual asset-backed securitizations exceeded the annual total volume of corporate bonds issued in the United States,[1] and (2) the collapse of the major investment banks. In overview, it is clear that the collapse of the investment banks was precipitated by laxity in the asset-backed securitization market (for which the SEC arguably may bear some responsibility), but that this laxity began with the reckless behavior of many investment banks. Collectively, they raced like lemmings over the cliff by abandoning the usual principles of sound risk management both by (i) increasing their leverage dramatically after 2004, and (ii) abandoning diversification in pursuit of obsessive focus on high-profit securitizations. Although these firms were driven by intense competition and short-term oriented systems of executive compensation, their ability to race over the cliff depended on their ability to obtain regulatory exemptions from the SEC. Thus, as will be discussed, the SEC raced to deregulate. In 2005, it adopted Regulation AB (an acronym for "Asset-Backed"), which simplified the registration of asset-backed securitizations without requiring significant due diligence or responsible verification of the essential facts. Even more importantly, in 2004, it introduced its Consolidated Supervised Entity Program ("CSE"), which allowed the major investment banks to determine their own capital adequacy and permissible leverage by designing their own credit risk models (to which the SEC deferred). Effectively, the SEC abandoned its long-standing "net capital rule"[2] and deferred to a system of self-regulation for these firms, which largely permitted them to develop their own standards for capital adequacy.

For the future, it is less important to allocate culpability and blame than to determine what responsibilities the SEC can perform adequately. The recent evidence suggests that the SEC cannot easily or effectively handle the role of systemic risk

[1] See John C. Coffee, Jr., Joel Seligman & Hillary Sale, SECURITIES REGULATION: Cases and Materials (10th ed. 2007) at 10.
[2] See Rule 15c3-1 ("Net Capital Requirements for Brokers and Dealers), 17 CFR § 240.15c3-1.

regulator or even the more modest role of a prudential financial supervisor, and it may be more subject to capture on these issues than other agencies. This leads me to conclude (along with others) that the U.S. needs one systemic risk regulator who, among other tasks, would have responsibility for the capital adequacy and safety and soundness of all institutions that are too "big to fail."[3] The key advantage of a unified systemic risk regulator with jurisdiction over <u>all</u> large financial institutions is that it solves the critical problem of regulatory arbitrage. AIG, which has already cost U.S. taxpayers over $150 billion, presents the paradigm of this problem because it managed to issue billions in credit default swaps without becoming subject to regulation by any regulator at either the federal or state level.

But one cannot stop with this simple prescription. The next question becomes what should be the relationship between such a systemic risk regulator and the SEC? Should the SEC simply be merged into it or subordinated to it? I will argue that it should not. Rather, the U.S. should instead follow a "twin peaks" structure (as the Treasury Department actually proposed in early 2008 before the current crisis crested) that assigns prudential supervision to one agency and consumer protection and transparency regulation to another. Around the globe, countries are today electing between a unified financial regulator (as typified by the Financial Services Authority ("FSA") in the U.K.) and a "twin peaks" model (which both Australia and The Netherlands have followed). I will argue that the latter model is preferable because it deals better with serious conflict of interest problems and the differing cultures of securities and banking regulators. By

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[3] I have made this argument in greater detail in an article with Professor Hillary Sale, which will appear in the 75th Anniversary of the SEC volume of the Virginia Law Review. See Coffee and Sale, "Redesigning the SEC: Does the Treasury Have a Better Idea? (available on the Social Science Research Network at http://ssrn.com/abstract=1309776).

culture, training, and professional orientation, banking regulators are focused on protecting bank solvency, and they historically have often regarded increased transparency as inimical to their interests, because full disclosure of a bank's problems might induce investors to withdraw deposits and credit. The result can sometimes be a conspiracy of silence between the regulator and the regulated to hide problems. In contrast, this is one area where the SEC's record is unblemished; it has always defended the principle that "sunlight is the best disinfectant." Over the long-run, that is the sounder rule.

If I am correct that a "twin peaks" model is superior, then Congress has to make clear the responsibilities of both agencies in any reform legislation in order to avoid predictable jurisdictional conflicts and to identify a procedure by which to mediate those disputes that are unavoidable.

Part I. What Went Wrong?

This section will begin with the problems in the mortgage loan market, then turn to the failure of credit-rating agencies, and finally examine the SEC's responsibility for the collapse of the major investment banks.

A. The Great American Real Estate Bubble

The earliest origins of the 2008 financial meltdown probably lie in deregulatory measures, taken by the U.S. Congress at the end of the 1990s, that placed some categories of derivatives and the parent companies of investment banks beyond effective regulation.[4] Still, most accounts of the crisis start by describing the rapid inflation of a

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[4] Interestingly, this same diagnosis was recently given by SEC Chairman Christopher Cox to this Committee. See Testimony of SEC Chairman Christopher Cox before the Committee on Banking, Housing and Urban Affairs, United States Senate, September 23, 2008. Perhaps defensively, Chairman Cox located the origins of the crisis in the failure of Congress to give the SEC jurisdiction over investment bank holding

bubble in the U.S. housing market. Here, one must be careful. The term "bubble" can be a substitute for closer analysis and may carry a misleading connotation of inevitability. In truth, bubbles fall into two basic categories: those that are demand-driven and those that are supply-driven. The majority of bubbles fall into the former category,[5] but the 2008 financial market meltdown was clearly a supply-driven bubble,[6] fueled by the fact that mortgage loan originators came to realize that underwriters were willing to buy portfolios of mortgage loans for asset-backed securitizations without any serious investigation of the underlying collateral. With that recognition, loan originators' incentive to screen borrowers for creditworthiness dissipated, and a full blown "moral hazard" crisis was underway.[7]

The evidence is clear that, between 2001 and 2006, an extraordinary increase occurred in the supply of mortgage funds, with much of this increased supply being channeled into poorer communities in which previously there had been a high denial rate on mortgage loan applications.[8] With an increased supply of mortgage credit, housing prices rose rapidly, as new buyers entered the market. But at the same time, a corresponding increase in mortgage debt relative to income levels in these same communities made these loans precarious. A study by University of Chicago Business

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companies or over-the-counter derivatives (including credit default swaps), thereby creating a regulatory void.

[5] For example, the high-tech Internet bubble that burst in early 2000 was a demand-driven bubble. Investors simply overestimated the value of the Internet, and for a time initial public offerings of "dot.com" companies would trade at ridiculous and unsustainable multiples. But full disclosure was provided to investors and the SEC cannot be faulted in this bubble – unless one assigns it the very paternalistic responsibility of protecting investors from themselves.

[6] This is best evidenced by the work of two University of Chicago Business School professors discussed below. See Atif Mian and Amir Sufi, "The Consequences of Mortgage Credit Expansion: Evidence from the 2007 Mortgage Default Crisis, (http://ssrn.com/abstract=1072304) (May 2008).

[7] Interestingly, "moral hazard" problems also appear to have underlain the "savings and loan" crisis in the United States in the 1980s, which was the last great crisis involving financial institutions in the United States. For a survey of recent banking crises making this point, see Note, Anticipatory Regulation for the Management of Banking Crises, 38 Colum. J. L. & Soc. Probs. 251 (2005).

[8] See Mian and Sufi, supra note 6, at 11 to 13.

School professors has found that two years after this period of increased mortgage availability began, a corresponding increase started in mortgage defaults – in exactly the same zip code areas where there had been a high previous rate of mortgage loan denials.[9] This study determined that a one standard deviation in the supply of mortgages from 2001 to 2004 produced a one standard deviation increase thereafter in mortgage default rates.[10]

Even more striking, however, was its finding that the rate of mortgage defaults was highest in those neighborhoods that had the highest rates of securitization.[11] Not only did securitization correlate with a higher rate of default, but that rate of default was highest when the mortgages were sold by the loan originator to financial firms unaffiliated with the loan originator.[12] Other researchers have reached a similar conclusion: conditional on its being actually securitized, a loan portfolio that was more likely to be securitized was found to default at a 20% higher rate than a similar risk profile loan portfolio that was less likely to be securitized.[13] Why? The most plausible interpretation is that securitization adversely affected the incentives of lenders to screen their borrowers.

Such a conclusion should not surprise. It simply reflects the classic "moral hazard" problem that arises once loan originators did not bear the cost of default by their borrowers. As early as March, 2008, The President's Working Group on Financial Markets issued a "Policy Statement on Financial Market Developments" that explained

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[9] Id. at 18-19.
[10] Id. at 19.
[11] Id. at 20-21.
[12] Id.
[13] See Benjamin J. Keys, Tanmoy K. Mukherjee, Amit Seru, and Vikrant Vig, "Did Securitization Lead to Lax Screening? Evidence from Subprime Loans," (http://ssrn.com/abstract=1093137) (April, 2008). These authors conclude that securitization did result in "lax screening."

the financial crisis as the product of five "principal underlying causes of the turmoil in financial markets":

"● a breakdown in underwriting standards for subprime mortgages;

- a significant erosion of market discipline by those involved in the securitization process, including originators, underwriters, credit rating agencies, and global investors, related in part to failures to provide or obtain adequate risk disclosures;
- flaws in credit rating agencies' assessment of subprime residential mortgages . . . and other complex structured credit products, . . .
- risk management weaknesses at some large U.S. and European financial institutions; and
- regulatory policies, including capital and disclosure requirements, that failed to mitigate risk management weaknesses."[14]

Correct as the President's Working Group was in noting the connection between the decline of discipline in the mortgage loan origination market and a similar laxity among underwriters in the capital markets, it did not focus on the direction of the causality. Did mortgage loan originators fool or defraud investment bankers? Or did investment bankers signal to loan originators that they would buy whatever the loan originators had to sell? The available evidence tends to support the latter hypothesis: namely, that irresponsible lending in the mortgage market was a direct response to the capital markets' increasingly insatiable demand for financial assets to securitize. If

[14] The President's Working Group on Financial Markets, "Policy Statement on Financial Market Developments," at 1 (March 2008).

underwriters were willing to rush deeply flawed asset-backed securitizations to the market, mortgage loan originators had no rational reason to resist them.

The rapid deterioration in underwriting standards for subprime mortgage loans is revealed at a glance in the following table:[15]

Underwriting Standards in Subprime Home-Purchase Loans, 2001-2006

	Low/No-Doc Share	**Debt Payments/ Income**	**Loan/Value**	**ARM Share**	**Interest-Only Share**
2001	28.5%	39.7%	84.0%	73.8%	0.0%
2002	38.6%	40.1%	84.4%	80.0%	2.3%
2003	42.8%	40.5%	86.1%	80.1%	8.6%
2004	45.2%	41.2%	84.9%	89.4%	27.3%
2005	50.7%	41.8%	83.2%	93.3%	37.8%
2006	50.8%	42.4%	83.4%	91.3%	22.8%

Source: Freddie Mac, obtained from the International Monetary Fund.

The investment banks could not have missed that low document loans (also called “liar loans”) rose from 28.5% to 50.8% over the five year interval between 2001 and 2006 or that “interest only” loans (on which there was no amortization of principal) similarly grew from 6% to 22.8% over this same interval.

Thus, the real mystery is not why loan originators made unsound loans, but why underwriters bought them. Here, it seems clear that both investment and commercial banks saw high profits in securitizations and believed they could quickly sell on a global basis any securitized portfolio of loans that carried an investment grade rating. In

[15] See Allen Ferrell, Jennifer Bethel and Gang Hu, Legal and Economic Issues in Litigation Arising from the 2007-2008 Credit Crisis (Harvard Law & Economics Discussion Paper No. 612, Harvard Law School Program in Risk Regulation Research Paper No. 08-5) at Table 4.

addition, investment banks may have had a special reason to focus on securitizations: structured finance offered a level playing field where they could compete with commercial banks, whereas, as discussed later, commercial banks had inherent advantages at underwriting corporate debt and were gradually squeezing the independent investment banks out of this field.[16] Consistent with this interpretation, anecdotal evidence suggests that due diligence efforts within the underwriting community slackened in asset-backed securitizations after 2000.[17] Others have suggested that the SEC contributed to this decline by softening its disclosure and due diligence standards for asset-backed securitizations,[18] in particular by adopting in 2005 Regulation AB, which covers the issuance of asset backed securities.[19] From this perspective, relaxed discipline in both the private and public sectors overlapped to produce a disaster.

B. Credit Rating Agencies As Gatekeepers

It has escaped almost no one's attention that the credit rating agencies bear much responsibility for the 2008 financial crisis, with the consensus view being that they inflated their ratings in the case of structured finance offerings. Many reasons have been

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[16] See text and notes infra at notes 56 to 61.
[17] Investment banks formerly had relied on "due diligence" firms that they employed to determine whether the loans within a loan portfolio were within standard parameters. These firms would investigate and inform the underwriter as to the percentage of the loans that were "exception" loans (i.e., loans outside the investment bank's normal guidelines). Subsequent to 2000, the percentage of "exception loans" in portfolios securitized by these banks often rose from the former level of 25% to as high as 80%. Also, the underwriters scaled back the intensity of the investigations that they would authorize the "due diligence" firm to conduct, reducing from 30% to as few as 5% the number of loans in a portfolio that it was to check. See Vikas Bajaj & Jenny Anderson, "Inquiry Focuses on Withholding of Data on Loans," N.Y. Times, January 12, 2008 at p. A-1.
[18] See Richard Mendales, "Collateralized Explosive Devices: Why Securities Regulation Failed to Prevent the CDO Meltdown And How To Fix It" (Working Paper 2008) at 36 (forthcoming in 2009 U. Ill. L. Rev. _).
[19] See Securities Act Release No. 8518 ("Asset-Backed Securities") (January 7, 2005), 79 FR 1506). Regulation AB codified a series of "no action" letters and established disclosures standards for all asset-backed securitizations. See 17 C.F.R. §§ 229.1100-1123 (2005). Although it did not represent a sharp deregulatory break with the past, Regulation AB did reduce the due diligence obligation of underwriters by eliminating any need to assure that assets included in a securitized pool were adequately documented. See Mendales, supra note 18.

given for their poor performance: (1) rating agencies faced no competition (because there are really only three major rating agencies); (2) they were not disciplined by the threat of liability (because credit rating agencies in the U.S. appear never to have been held liable and almost never to have settled a case with any financial payment); (3) they were granted a "regulatory license" by the SEC, which has made an investment grade rating from a rating agency that was recognized by the SEC a virtual precondition to the purchase of debt securities by many institutional investors; (4) they are not required to verify information (as auditors and securities analysts are), but rather simply express views as to the creditworthiness of the debt securities based on the assumed facts provided to them by the issuer.[20] These factors all imply that credit rating agencies had less incentive than other gatekeepers to protect their reputational capital from injury. After all, if they face little risk that new entrants could enter their market to compete with them or that they could be successfully sued, they had less need to invest in developing their reputational capital or taking other precautions. All that was necessary was that they avoid the type of major scandal, such as that which destroyed Arthur Andersen & Co., the accounting firm, that had made it impossible for a reputable company to associate with them.

Much commentary has suggested that the credit rating agencies were compromised by their own business model, which was an "issuer pays" model under which nearly 90% of their revenues came from the companies they rated.[21] Obviously, an "issuer pays" model creates a conflict of interest and considerable pressure to satisfy the

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[20] For these and other explanations, see Coffee, GATEKEEPERS: The Professions and Corporate Governance (Oxford University Press 2006), and Frank Partnoy, "How and Why Credit Rating Agencies Are Not Like Other Gatekeepers" (http://ssrn.com/abstract=900257) (May 2006).

[21] See Partnoy, supra note 20.

issuer who paid them. Still, neither such a conflicted business model nor the other factors listed above can explain the dramatic deterioration in the performance of the rating agencies over the last decade. Both Moody's and Standard & Poor were in business before World War I and performed at least acceptably until the later 1990s. To account for their more recent decline in performance, one must point to more recent developments and not factors that long were present. Two such factors, each recent and complementary with the other, do provide a persuasive explanation for this deterioration: (1) the rise of structured finance and the change in relationships that it produced between the rating agencies and their clients; and (2) the appearance of serious competition within the ratings industry that challenged the long stable duopoly of Moody's and Standard & Poor's and that appears to have resulted in ratings inflation.

First, the last decade witnessed a meteoric growth in the volume and scale of structured finance offerings. One impact of this growth was that it turned the rating agencies from marginal, basically break-even enterprises into immensely profitable enterprises that rode the crest of the breaking wave of a new financial technology. Securitizations simply could not be sold without "investment grade" credit ratings from one or more of the Big Three rating agencies. Structured finance became the rating agencies' leading source of revenue. Indeed by 2006, structured finance accounted for 54.2% of Moody's revenues from its ratings business and 43.5% of its overall revenues.[22] In addition, rating structured finance products generated much higher fees than rating similar amounts of corporate bonds.[23] For example, rating a $350 million mortgage pool

[22] See In re Moody's Corporation Securities Litigation, 2009 U.S. Dist. LEXIS 13894 (S.D.N.Y. February 23, 2009) at *6 (also noting that Moody's grossed $1.635 billion from its ratings business in 2006).
[23] See Gretchen Morgenson, "Debt Watchdogs: Tamed or Caught Napping?" New York Times, December 7, 2008 at p. 1, 40.

could justify a fee of $200,000 to $250,000, while rating a municipal bond of similar size justified only a fee of $50,000.[24]

Beyond simply the higher profitability of rating securitized transactions, there was one additional difference about structured finance that particularly compromised the rating agencies as gatekeepers. In the case of corporate bonds, the rating agencies rated thousands of companies, no one of which controlled any significant volume of business. No corporate issuer, however large, accounted for any significant share of Moody's or S&P's revenues. But with the rise of structured finance, the market became more concentrated. As a result, the major investment banks acquired considerable power over the rating agencies, because each of them had "clout," bringing highly lucrative deals to the agencies on a virtually monthly basis. As the following chart shows, the top six underwriters controlled over 50% of the mortgage-backed securities underwriting market in 2007, and the top eleven underwriters each had more than 5% of the market and in total controlled roughly 80% of this very lucrative market on whom the rating agencies relied for a majority of their ratings revenue:[25]

MBS Underwriters in 2007

Rank	Book Runner	Number of Offerings	Market Share	Proceed Amount + Overallotment Sold in US ($mill)
1	Lehman Brothers	120	10.80%	$100,109
2	Bear Stearns & Co., Inc.	128	9.90%	$91,696
3	Morgan Stanley	92	8.20%	$75,627
4	JP Morgan	95	7.90%	$73,214
5	Credit Suisse	109	7.50%	$69,503

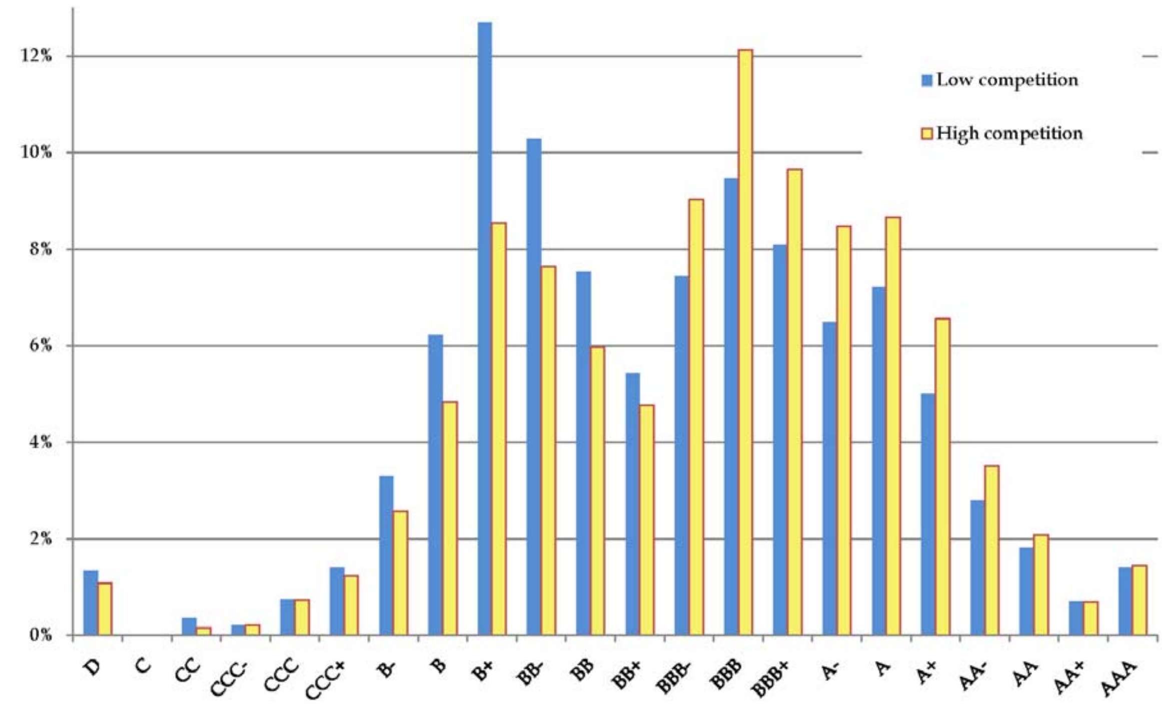
[24] Id.
[25] See Ferrell, Bethel and Hu, supra note 15, at Table 2. For anecdotal evidence that ratings were changed at the demand of the investment banks, see Morgenson, supra note 23.

6	Bank of America Securities LLC	101	6.80%	$62,776
7	Deutsche Bank AG	85	6.20%	$57,337
8	Royal Bank of Scotland Group	74	5.80%	$53,352
9	Merrill Lynch	81	5.20%	$48,407
10	Goldman Sachs & Co.	60	5.10%	$47,696
11	Citigroup	95	5.00%	$46,754
12	UBS	74	4.30%	$39,832

If the rise of structured finance was the first factor that compromised the credit rating agencies, the second factor was at least as important and had an even clearer empirical impact. Until the late 1990s, Moody's and Standard & Poor's shared a duopoly over the rating of U.S. corporate debt. But, over the last decade, a third agency, Fitch Ratings, grew as the result of a series of mergers and increased its U.S. market share from 10% to approximately a third of the market.[26] The rise of Fitch challenged the established duopoly. What was the result? A Harvard Business School study has found three significant impacts: (1) the ratings issued by the two dominant rating agencies shifted significantly in the direction of higher ratings; (2) the correlation between bond yields and ratings fell, suggesting that under competitive pressure ratings less reflected the market's own judgment; and (3) the negative stock market reaction to bond rating downgrades increased, suggesting that a downgrade now conveyed worse news because the rated offering was falling to an even lower quality threshold than before.[27] Their conclusions are vividly illustrated by one graph they provide that shows the correlation between grade inflation and higher competition:

[26] Bo Becker and Todd Milburn, "Reputation and Competition: Evidence from the Credit Rating Industry," Harvard Business School, Working Paper No. 09-051 (2008) (http://ssrn.com/abstract =1278150) at p. 4.
[27] Id. at 17.

Figure 2.
Firm credit ratings distribution: high and low competition in the credit rating industry



Under high competition, lower ratings declined and investment grade rations soared. The authors conclude that increased competition may impair "the reputational mechanism that underlies the provision of good quality ratings."[28]

The anecdotal evidence supports a similar conclusion: the major rating agencies responded to the competitive threat from Fitch by making their firms "more client-friendly and focused on market share."[29] Put simply, the evidence implies that the rapid change toward a more competitive environment made the competitors not more faithful to investors, but more dependent on their immediate clients, the issuers. From the standpoint of investors, agency costs increased.

C. The Responsibility of the SEC

[28] Id. at 21.
[29] See "Ratings Game – As Housing Boomed, Moody's Opened Up," The Wall Street Journal, April 11, 2008 at p. A-1.

Each of the major investment banks that failed, merged, or converted into bank holding companies in 2008 had survived prior recessions, market panics, and repeated turmoil and had long histories extending back as far as the pre-Civil War era. Yet, each either failed or was gravely imperiled within the same basically six month period following the collapse of Bear Stearns in March 2008.[30]

If their uniform collapse is not alone enough to suggest the likelihood of regulatory failure, one additional common fact unites them: each of these five firms voluntarily entered into the SEC's Consolidated Supervised Entity ("CSE") Program, which was established by the SEC in 2004 for only the largest investment banks.[31] Indeed, these five investment banks were the only investment banks permitted by the SEC to enter the CSE program. A key attraction of the CSE Program was that it permitted its members to escape the SEC's traditional net capital rule, which placed a maximum ceiling on their debt to equity ratios, and instead elect into a more relaxed "alternative net capital rule" that contained no similar limitation.[32] The result was predictable: all five of these major investment banks increased their debt-to-equity

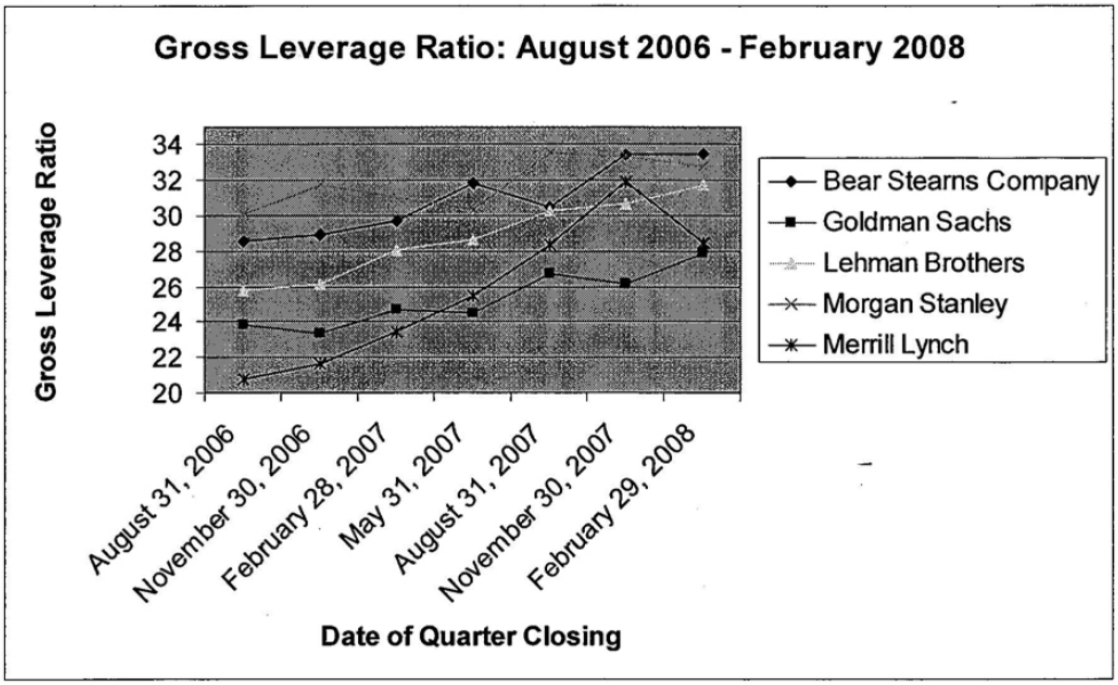
[30] For a concise overview of these developments, see Jon Hilsenrath, Damian Palette, and Aaron Lucchetti, "Goldman, Morgan Scrap Wall Street Model, Become Banks in Bid to Ride Out Crisis," The Wall Street Journal, September 22, 2008 at p. A-1 (concluding that independent investment banks could not survive under current market conditions and needed closer regulatory supervision to establish credibility).

[31] See Securities Exchange Act Release No. 34-49830 (June 21, 2004), 69 FR 34428 ("Alternative Net Capital Requirements for Broker-Dealers That Are Part of Consolidated Supervised Entities").

[32] The SEC's "net capital rule," which dates back to 1975, governs the capital adequacy and aggregate indebtedness permitted for most broker-dealers. See Rule 15c3-1 ("Net Capital Requirements for Brokers and Dealers"). 17 C.F.R. § 240.15c3-1. Under subparagraph (a)(1)(i) of this rule, aggregate indebtedness is limited to fifteen times the broker-dealer's net capital; a broker-dealer may elect to be governed instead by subparagraph (a)(1)(ii) of this rule, which requires it maintain its net capital at not less than the greater of $250,000 or two percent of "aggregate debit items" as computed under a special formula that gives "haircuts" (i.e., reduces the valuation) to illiquid securities. Both variants place fixed limits on leverage.

leverage ratios significantly over the brief two year period following their entry into the CSE Program, as shown by Figure 1 below:[33]

Figure 1. CSE Firms- Gross Leverage Ratios



For example, at the time of its insolvency, Bear Stearns' gross leverage ratio had hit 33 to 1.[34]

The above chart likely understates the true increase in leverage because gross leverage (i.e., assets divided by equity) does not show the increase in off-balance sheet liabilities, as the result of conduits and liquidity puts. Thus, another measure may better show the sudden increase in risk. One commonly used metric for banks is the bank's value at risk (VaR) estimate, which banks report to the SEC in their annual report on Form 10-K. This measure is intended to show the risk inherent in their financial

[33] This chart comes from U.S. Securities and Exchange Commission, Office of the Inspector General, "SEC's Oversight of Bear Stearns and Related Entities: The Consolidated Entity Program ("Report No. 446-A, September 25, 2008) (hereinafter "SEC Inspector General Report") at Appendix IX at p. 120.
[34] See SEC Inspector General Report at 19.

portfolios. The chart below shows “Value at Risk” for the major underwriters over the interval 2004 to 2007:[35]

Value at Risk, 2004-2007

Firms	2004 ($mil)	2005 ($mil)	2006 ($mil)	2007 ($mil)
Bank of America	$44.1	$41.8	$41.3	---
Bear Stearns	14.8	21.4	28.8	69.3
Citigroup	116.0	93.0	106.0	---
Credit Suisse	55.1	66.2	73.0	---
Deutsche Bank	89.8	82.7	101.5	---
Goldman Sachs	67.0	83.0	119.0	134.0
JP Morgan	78.0	108.0	104.0	---
Lehman Brothers	29.6	38.4	54.0	124.0
Merrill Lynch	34.0	38.0	52.0	---
Morgan Stanley	94.0	61.0	89.0	83.0
UBS	103.4	124.7	132.8	---
Wachovia	21.0	18.0	30.0	---

VaR statistics are reported in the 10K or 20F (in the case of foreign firms) of the respective firms. Note that firms use different assumptions in computer their Value of Risk. Some annual reports are not yet available for 2007.

Between 2004 and 2007, both Bear Stearns and Lehman more than quadrupled their value at risk estimates, while Merrill Lynch’s figure also increased significantly. Not altogether surprisingly, they were the banks that failed.

These facts provide some corroboration for an obvious hypothesis: excessive deregulation by the SEC caused the liquidity crisis that swept the global markets in

[35] See Ferrell, Bethel and Hu, supra note 15, at Table 8. Value at risk estimates have proven to be inaccurate predictors of the actual writedowns experienced by banks. They are cited here not because they are accurate estimates of risk, but because the percentage increases at the investment banks was generally extreme. Even Goldman Sachs, which survived the crisis in better shape than its rivals, saw its VaR estimate more than double over this period.

2008.[36] Still, the problem with this simple hypothesis is that it may be too simple. Deregulation did contribute to the 2008 financial crisis, but the SEC's adoption of the CSE Program in 2004 was not intended to be deregulatory. Rather, the program was intended to compensate for earlier deregulatory efforts by Congress that had left the SEC unable to monitor the overall financial position and risk management practices of the nation's largest investment banks. Still, even if the 2004 net capital rule changes were not intended to be deregulatory, they worked out that way in practice. The ironic bottom line is that the SEC unintentionally deregulated by introducing an alternative net capital rule that it could not effectively monitor.

The events leading up to the SEC's decision to relax its net capital rule for the largest investment banks began in 2002, when the European Union adopted its Financial Conglomerates Directive.[37] The main thrust of the E.U.'s new directive was to require regulatory supervision at the parent company level of financial conglomerates that included a regulated financial institution (e.g., a broker-dealer, bank or insurance company). The E.U.'s entirely reasonable fear was that the parent company might take actions that could jeopardize the solvency of the regulated subsidiary. The E.U.'s directive potentially applied to the major U.S. investment and commercial banks because all did substantial business in London (and elsewhere in Europe). But the E.U.'s directive

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[36] For the bluntest statement of this thesis, see Stephen Labaton, "S.E.C. Concedes Oversight Plans Fueled Collapse," New York Times, September 27, 2008 at p. 1. Nonetheless, this analysis is oversimple. Although SEC Chairman Cox did indeed acknowledge that there were flaws in the "Consolidated Supervised Entity" Program, he did not concede that it "fueled" the collapse or that it represented deregulation. As discussed below, the SEC probably legitimately believed that it was gaining regulatory authority from the CSE Program (but it was wrong).

[37] See Council Directive 2002/87, Financial Conglomerates Directive, 2002 O.J. (L 35) of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives. For an overview of this directive and its rationale, see Jorge E. Vinuales, The International Regulation of Financial Conglomerates: A Case Study of Equivalence as an Approach to Financial Integration, 37 Cal. W. Int'l L.J. 1, at 2 (2006).

contained an exemption for foreign financial conglomerates that were regulated by their home countries in a way that was deemed "equivalent" to that envisioned by the directive. For the major U.S. commercial banks (several of which operated a major broker-dealer as a subsidiary), this afforded them an easy means of avoiding group-wide supervision by regulators in Europe, because they were subject to group-level supervision by U.S. banking regulators.

U.S. investment banks had no similar escape hatch, as the SEC had no similar oversight over their parent companies. Thus, fearful of hostile regulation by some European regulators,[38] U.S. investment banks lobbied the SEC for a system of "equivalent" regulation that would be sufficient to satisfy the terms of the directive and give them immunity from European oversight.[39] For the SEC, this offered a serendipitous opportunity to oversee the operations of investment bank holding companies, which authority the SEC had sought for some time. Following the repeal of the Glass-Steagall Act, the SEC had asked Congress to empower it to monitor investment bank holding companies, but it had been rebuffed. Thus, the voluntary entry of the holding companies into the Consolidated Supervised Entity program must have struck the SEC as a welcome development, and Commission unanimously approved the program without any partisan disagreement.[40]

But the CSE Program came with an added (and probably unnecessary) corollary: Firms that entered the CSE Program were permitted to adopt an alternative and more

[38] Different European regulators appear to have been feared by different entities. Some commercial banks saw French regulation as potentially hostile, while U.S. broker-dealers, all largely based in London, did not want their holding companies to be overseen by the U.K.'s Financial Services Agency ("FSA").
[39] See Stephen Labaton, "Agency's '04 Rule Let Banks Pile Up Debt and Risk," New York Times, October 3, 2008 at A-1 (describing major investment banks as having made an "urgent plea" to the SEC in April, 2004).
[40] See Securities Exchange Act Release No. 34-49830, supra note 31.

relaxed net capital rule governing their debt to net capital ratio. Under the traditional net capital rule, a broker-dealer was subject to fixed ceilings on its permissible leverage. Specifically, it either had to (a) maintain aggregate indebtedness at a level that could not exceed fifteen times net capital,[41] or (b) maintain minimum net capital equal to not less than two percent of "aggregate debit items."[42] For most broker-dealers, this 15 to 1 debt to net capital ratio was the operative limit within which they needed to remain by a comfortable margin.

Why did the SEC allow the major investment banks to elect into an alternative regime that placed no outer limit on leverage? Most likely, the Commission was principally motivated by the belief that it was only emulating the more modern "Basel II" standards that the Federal Reserve Bank and European regulators were then negotiating. To be sure, the investment banks undoubtedly knew that adoption of Basel II standards would permit them to increase leverage (and they lobbied hard for such a change). But, from the SEC's perspective, the goal was to design the CSE Program to be broadly consistent with the Federal Reserve's oversight of bank holding companies, and the program even incorporated the same capital ratio that the Federal Reserve mandated for bank holding companies.[43] Still, the Federal Reserve introduced its Basel II criteria more slowly and gradually, beginning more than a year later, while the SEC raced in 2004 to

[41] See Rule 15c3-1(a)(1)(i)("Alternative Indebtedness Standard"), 17 C.F.R. § 240.15c3-1(a)(1).
[42] See Rule 15c3-1(a)(1)(ii)("Alternative Standard"), 17 C.F.R. §240.15c3-1(a)(1)(ii). This alternative standard is framed in terms of the greater of $250,000 or two percent, but for any investment bank of any size, two percent will be the greater. Although this alternative standard may sound less restrictive, it was implemented by a system of "haircuts" that wrote down the value of investment assets to reflect their illiquidity.
[43] See SEC Inspector General Report at 10-11. Under these standards, a "well-capitalized" bank was expected to maintain a 10 percent capital ratio. Id. at 11. Nonetheless, others have argued that Basel II "was not designed to be used by investment banks" and that the SEC "ought to have been more careful in moving banks on to the new rules." See "Mewling and Puking: Bank Regulation," The Economist, October 25, 2008 (U.S. Edition).

introduce a system under which each investment bank developed its own individualized credit risk model. Today, some believe that Basel II represents a flawed model even for commercial banks, while others believe that, whatever its overall merits, it was particularly ill-suited for investment banks.[44]

Yet, what the evidence demonstrates most clearly is that the SEC simply could not implement this model in a fashion that placed any real restraint on its subject CSE firms. The SEC's Inspector General examined the failure of Bear Stearns and the SEC's responsibility therefor and reported that Bear Stearns had remained in compliance with the CSE Program's rules at all relevant times.[45] Thus, if Bear Stearns had not cheated, this implied (as the Inspector General found) that the CSE Program, itself, had failed. The key question is then what caused the CSE Program to fail. Here, three largely complementary hypotheses are plausible. First, the Basel II Accords may be flawed, either because they rely too heavily on the banks' own self-interested models of risk or on the highly conflicted ratings of the major credit rating agencies.[46] Second, even if Basel II made sense for commercial banks, it may have been ill-suited for investment banks.[47] Third, whatever the merits of Basel II in theory, the SEC may have simply been incapable of implementing it.

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[44] For the view that Basel II excessively deferred to commercial banks to design their own credit risk models and their increase leverage, see Daniel K. Tarullo, BANKING ON BASEL: The Future of International Financial Regulation (2008). Mr. Tarullo has recently been nominated by President Obama to the Board of Governors of the Federal Reserve Board. For the alternative view, that Basel II was uniquely unsuited for investment banks, see "Mewling and Puking," supra note 43.
[45] SEC Inspector General Report, 10.
[46] The most prominent proponent of this view is Professor Daniel Tarullo. See supra note 44.
[47] See "Mewling and Puking," supra note 43.

Clearly, however, the SEC moved faster and farther to defer to self-regulation by means of Basel II than did the Federal Reserve.[48] Clearly also, the SEC's staff was unable to monitor the participating investment banks closely or to demand specific actions by them. Basel II's approach to the regulation of capital adequacy at financial institutions contemplated close monitoring and supervision. Thus, the Federal Reserve assigns members of its staff to maintain an office within a regulated bank holding company in order to provide constant oversight. In the case of the SEC, a team of only three SEC staffers were assigned to each CSE firm[49] (and a total of only thirteen individuals comprised the SEC's Office of Prudential Supervision and Risk Analysis that oversaw and conducted this monitoring effort).[50] From the start, it was a mismatch: three SEC staffers to oversee an investment bank the size of Merrill Lynch, which could easily afford to hire scores of highly quantitative economists and financial analysts, implied that the SEC was simply outgunned.[51]

This mismatch was compounded by the inherently individualized criteria upon which Basel II relies. Instead of applying a uniform standard (such as a specific debt to equity ratio) to all financial institutions, Basel II contemplated that each regulated financial institution would develop a computer model that would generate risk estimates for the specific assets held by that institution and that these estimates would determine the level of capital necessary to protect that institution from insolvency. Thus, using the Basel II methodology, the investment bank generates a mathematical model that crunches

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[48] The SEC adopted its CSE program in 2004. The Federal Reserve only agreed in principle to Basel II in late 2005. See Stavros Gadinis, The Politics of Competition in International Financial Regulation, 49 Harv. Int'l L. J. 447, 507 n. 192 (2008).
[49] SEC Inspector General Report at 2.
[50] Id. Similarly, the Office of CSE Inspectors had only seven staff. Id.
[51] Moreover, the process effectively ceased to function well before the 2008 crisis hit. After SEC Chairman Cox re-organized the CSE review process in the Spring of 2007, the staff did not thereafter complete "a single inspection." See Labaton, supra note 39.

historical data to evaluate how risky its portfolio assets were and how much capital it needed to maintain to protect them. Necessarily, each model was ad hoc, specifically fitted to that specific financial institution. But no team of three SEC staffers was in a position to contest these individualized models or the historical data used by them. Effectively, the impact of the Basel II methodology was to shift the balance of power in favor of the management of the investment bank and to diminish the negotiating position of the SEC's staff. Whether or not Basel II's criteria were inherently flawed, it was a sophisticated tool that was beyond the capacity of the SEC's largely legal staff to administer effectively.

The SEC's Inspector General's Report bears out this critique by describing a variety of instances surrounding the collapse of Bear Stearns in which the SEC's staff did not respond to red flags that the Inspector General, exercising 20/20 hindsight, considered to be obvious. The Report finds that although the SEC's staff was aware that Bear Stearns had a heavy and increasing concentration in mortgage securities, it "did not make any efforts to limit Bear Stearns mortgage securities concentration."[52] In its recommendations, the Report proposed both that the staff become "more skeptical of CSE firms' risk models" and that it "develop additional stress scenarios that have not already been contemplated as part of the prudential regulation process."[53]

Unfortunately, the SEC Inspector General Report does not seem realistic on this score. The SEC's staff cannot really hope to regulate through gentle persuasion. Unlike a prophylactic rule (such as the SEC's traditional net capital rule that placed a uniform ceiling on leverage for all broker-dealers), the identification of "additional stress

[52] SEC Inspector General Report at ix.
[53] SEC Inspector General Report at ix.

scenarios" by the SEC's staff does not necessarily lead to specific actions by the CSE firms; rather, such attempts at persuasion are more likely to produce an extended dialogue, with the SEC's staff being confronted with counter-models and interpretations by the financial institution's managers.

The unfortunate truth is that in an area where financial institutions have intense interests (such as over the question of their maximum permissible leverage), a government agency in the U.S. is unlikely to be able to obtain voluntary compliance. This conclusion is confirmed by a similar assessment from the individual with perhaps the most recent experience in this area. Testifying in September, 2008 testimony before the Senate Banking Committee, SEC Chairman Christopher Cox emphasized the infeasibility of voluntary compliance , expressing his frustration with attempts to negotiate issues such as leverage and risk management practices with the CSE firms. In a remarkable statement for a long-time proponent of deregulation, he testified:

> "[B]eyond highlighting the inadequacy of the . . . CSE program's capital and liquidity requirements, the last six months – during which the SEC and the Federal Reserve worked collaboratively with each of the CSE firms . . . – have made abundantly clear that voluntary regulation doesn't work."[54]

His point was that the SEC had no inherent authority to order a CSE firm to reduce its debt to equity ratio or to keep it in the CSE Program.[55] If it objected, a potentially endless regulatory negotiation might only begin.

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[54] See Testimony of SEC Chairman Christopher Cox before the Committee on Banking, Housing, and Urban Affairs, United States Senate, September 23, 2008 ("Testimony Concerning Turmoil in U.S. Credit Markets: Recent Actions Regarding Government Sponsored Entities, Investment Banks and Other Financial Institutions"), at p. 4 (available at www.sec.gov) (emphasis added). Chairman Cox has repeated this theme in a subsequent Op/Ed column in the Washington Post, in which he argued that "Reform legislation should steer clear of voluntary regulation and grant explicit authority where it is needed." See Christopher Cox, "Reinventing A Market Watchdog," The Washington Post, November 4, 2008 at A-17.
[55] Chairman Cox added in the next sentence of his Senate testimony: "There is simply no provision in the law authorizes the CSE Program, or requires investment bank holding companies to compute capital

Ultimately, even if one absolves the SEC of "selling out" to the industry in adopting the CSE Program in 2004, it is still clear at a minimum that the SEC lacked both the power and the expertise to restrict leverage by the major investment banks, at least once the regulatory process began with each bank generating its own risk model. Motivated by stock market pressure and the incentives of a short-term oriented executive compensation system, senior management at these institutions affectively converted the process into self-regulation.

One last factor also drove the rush to increased leverage and may best explain the apparent willingness of investment banks to relax their due diligence standards: competitive pressure and the need to establish a strong market share in a new and expanding market drove the investment banks to expand recklessly. For the major players in the asset-backed securitization market, the long-term risk was that they might be cut off from their source of supply, if loan originators were acquired by or entered into long-term relationships with their competitors, particularly the commercial banks. Needing an assured source of supply, some investment banks (most notably Lehman and Merrill, Lynch) invested heavily in acquiring loan originators and related real estate companies, thus in effect vertically integrating.[56] In so doing, they assumed even greater risk by increasing their concentration in real estate and thus their undiversified exposure to a downturn in that market. This need to stay at least even with one's competitors best

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measures or to maintain liquidity on a consolidated basis, or to submit to SEC requirements regarding leverage." Id. This is true, but if a CSE firm left the CSE program, it would presumably become subject to European regulation; thus, the system was not entirely voluntary and the SEC might have used the threat to expel a non-compliant CSE firm. The SEC's statements about the degree of control they had over participants in the CSE Program appear to have been inconsistent over time and possibly defensively self-serving. But clearly, the SEC did not achieve voluntary compliance.

[56] See Terry Pristin, "Risky Real Estate Deals Helped Doom Lehman," N.Y. Times, September 17, 2008 at C-6 (discussing Lehman's expensive, multi-billion dollar acquisition of Archstone-Smith); Gretchen Morgenson, "How the Thundering Herd Faltered and Fell," N.Y. Times, November 9, 2008 at B4-1 (analyzing Merrill Lynch's failure and emphasizing its acquisitions of loan originators).

explains the now famous line uttered by Charles Prince, the then CEO of Citigroup in July, 2007, just as the debt market was beginning to collapse. Asked by the Financial Times if he saw a liquidity crisis looming, he answered:

> "When the music stops, in terms of liquidity, things will get complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing."[57]

In short, competition among the major investment banks can periodically produce a mad momentum that sometimes leads to a lemmings-like race over the cliff.[58] This in essence had happened in the period just prior to the 2000 dot.com bubble, and again during the accounting scandals of 2001-2002, and this process repeated itself during the subprime mortgage debacle. Once the market becomes hot, the threat of civil liability – either to the SEC or to private plaintiffs in securities class actions – seems only weakly to constrain this momentum. Rationalizations are always available: "real estate prices never fall;" "the credit rating agencies gave this deal a 'Triple A' rating," etc. Explosive growth and a decline in professional standards often go hand in hand. Here, after 2000, due diligence

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[57] See Michiyo Nakamoto & David Wighton, "Citigroup Chief Stays Bullish on Buy-Outs," Financial Times, July 9, 2007, available at http://www.ft.com/cms/s/0/80e2987a-2e50-11dc-821c-0000779fd2ac.html.

[58] Although a commercial bank, Citigroup was no exception this race, impelled by the high fee income it involved. From 2003 to 2005, "Citigroup more than tripled its issuing of C.D.O.s to more than $30 billion from $6.28 billion. . . ." See Eric Dash and Julie Creswell, "Citigroup Pays for a Rush to Risk" N.Y. Times, November 22, 2008 at 1, 34. In 2005 alone, the New York Times estimates that Citigroup received over $500 million in fee income from these C.D.O. transactions. From being the sixth largest issuer of C.D.O.s in 2003, it rose to being the largest C.D.O. issuer worldwide by 2007, issuing in that year some $49.3 billion out of a worldwide total of $442.3 billion (or slightly over 11% of the world volume). Id. at 35. What motivated this extreme risk-taking? Certain of the managers running Citigroup's securitization business received compensation as high as $34 million per year (even though they were not among the most senior officers of the bank). Id. at 34. This is consistent with the earlier diagnosis that equity compensation inclines management to accept higher and arguably excessive risk. At the highest level of Citigroup's management, the New York Times reports that the primary concern was "that Citigroup was falling behind rivals like Morgan Stanley and Goldman." Id. at 34 (discussing Robert Rubin and Charles Prince's concerns). Competitive pressure is, of course, enforced by the stock market and Wall Street's short-term system of bonus compensation. The irony then is that a rational strategy of deleveraging cannot be pursued by making boards and managements more sensitive to shareholder desires.

standards appear to have been relaxed, even as the threat of civil liability in private securities litigation was growing.[59]

As an explanation for an erosion in professional standards, competitive pressure applies with particular force to those investment banks that saw asset-back securitizations as the core of their future business model. In 2002, a critical milestone was reached, as in that year the total amount of debt securities issued in asset-backed securitizations equaled (and then exceeded in subsequent years) the total amount of debt securities issued by public corporations.[60] Debt securitizations were not only becoming the leading business of Wall Street, as a global market of debt purchasers was ready to rely on investment grade ratings from the major credit rating agencies, but they were particularly important for the independent investment banks in the CSE Program.

Although all underwriters anticipated high rates of return from securitizations, the independent underwriters had gradually been squeezed out of their traditional line of business – underwriting corporate securities – in the wake of the step-by-step repeal of the Glass-Steagall Act. Beginning well before the formal repeal of that Act in 1999, the major commercial banks had been permitted to underwrite corporate debt securities and had increasingly exploited their larger scale and synergistic ability to offer both bank loans and underwriting services to gain an increasing share of this underwriting market. Especially for the smaller investment banks (e.g., Bear Stearns and Lehman), the future lay in new lines of business, where, as nimble and adaptive competitors, they could steal

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[59] From 1996 to 1999, the settlements in securities class actions totaled only $1.7 billion; thereafter, aggregate settlements rose exponentially, hitting a peak of $17.1 billion in 2006 alone. See Laura Simmons & Ellen Ryan, "Securities Class Action Settlements: 2006, Review and Analysis" (Cornerstone Research 2006) at 1. This decline of due diligence practices as liability correspondingly increased seems paradoxical, but may suggest that at least private civil liability does not effectively deter issuers or underwriters.

[60] For a chart showing the growth of asset-backed securities in relation to conventional corporate debt issuances over recent years, see J. Coffee, J. Seligman, and H. Sale, SECURITIES REGULATION: Case and Materials (10th ed. 2006) at p. 10.

a march on the larger and slower commercial banks. To a degree, both did, and Merrill eagerly sought to follow in their wake.[61] To stake out a dominant position, the CEOs of these firms adopted a "Damn-the-torpedoes-full-speed-ahead" approach that led them to make extremely risky acquisitions. Their common goal was to assure themselves a continuing source of supply of subprime mortgages to securitize, but in pursuit of this goal, both Merrill Lynch and Lehman made risky acquisitions, in effect vertically integrating into the mortgage loan origination field. These decisions, plus their willingness to acquire mortgage portfolios well in advance of the expected securitization transaction, left them undiversified and exposed to large writedowns when the real estate market soured.

Part II. Regulatory Modernization: What Should Be Done?

A. An Overview of Recent Developments

Financial regulation in the major capital markets today follows one of three basic organizational models:

1. The Functional/Institutional Model

In 2008, before the financial crisis truly broke, the Treasury Department released a major study of financial regulation in the United States.[62] This document (known as the "Blueprint") correctly characterized the United States as having a "current system of functional regulation, which maintains separate regulatory agencies across segregated

[61] For a detailed description of Merrill, Lynch's late entry into the asset-backed securitization field and its sometimes frenzied attempt to catch up with Lehman by acquiring originators of mortgage loans, see Gretchen Morgenson, "How the Thundering Herd Faltered and Fell," N.Y. Times, November 9, 2008, at BU-1. Merrill eventually acquired an inventory of $71 billion in risky mortgages, in part through acquisitions of loan originators. By mid-2008, an initial writedown of $7.9 billion forced the resignation of its CEO. As discussed in this New York Times article, loan originators dealing with Merrill believed it did not accurately understand the risks of their field. For Lehman's similar approach to acquisitions of loan originators, see text and note, supra, at note 56.
[62] The Department of the Treasury, Blueprint for Modernized Financial Regulatory Structure (2008) (hereinafter, "Blueprint").

functional lines of financial services, such as banking, insurance, securities, and futures."[63] Unfortunately, even this critical assessment may understate the dimensions of this problem of fragmented authority. In fact, the U.S. falls considerably short of even a "functional" regulatory model. By design, "functional" regulation seeks to subject similar activities to regulation by the same regulator. Its premise is that no one regulator can have, or easily develop, expertise in regulating all aspects of financial services. Thus, the securities regulator understands securities, while the insurance regulator has expertise with respect to the very different world of insurance. In the Gramm-Leach-Bliley Act of 1999 ("GLBA"), which essentially repealed the Glass-Steagall Act, Congress endorsed such a system of functional regulation.[64]

Nonetheless, the reality is that the United States actually has a hybrid system of functional and institutional regulation.[65] The latter approach looks not to functional activity, but to institutional type. Institutional regulation is seldom the product of deliberate design, but rather of historical contingency, piecemeal reform, and gradual evolution.

To illustrate this difference between functional and institutional regulation, let us hypothesize that, under a truly functional system, the securities regulator would have jurisdiction over all sales of securities, regardless of the type of institution selling the

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[63] Id. at 4 and 27.

[64] The Conference Report to the Gramm-Leach-Bliley Act clearly states this:

> Both the House and Senate bills generally adhere to the principle of functional regulation, which holds that similar activities should be regulated by the same regulator. Different regulators have expertise at supervising different activities. It is inefficient and impractical to expect a regulator to have or develop expertise in regulating all aspects of financial services. H.R. Rep. No. 106-434, at 157 (1999), *reprinted in* 1999 U.S.C.C.A.N. 1252.

[65] For this same assessment, see Heidi Mandanis Schooner & Michael Taylor, United Kingdom and United States Responses to the Regulatory Challenges of Modern Financial Markets, 38 Tex. Int'l L. J. 317, 328 (2003).

security. Conversely, let us assume that under an institutional system, jurisdiction over sales would be allocated according to the type of institution doing the selling. Against that backdrop, what do we observe today about the allocation of jurisdiction? Revealingly, under a key compromise in GLBA, the SEC did not receive general authority to oversee or enforce the securities laws with respect to the sale of government securities by a bank.[66] Instead, banking regulators retained that authority. Similarly, the drafters of the GLBA carefully crafted the definitions of "broker" and "dealer" in the Securities Exchange Act of 1934 to leave significant bank securities activities under the oversight of bank regulators and not the SEC.[67] Predictably, even in the relatively brief time since the passage of GLBA in 1999, the SEC and bank regulators have engaged in a continuing turf war over the scope of the exemptions accorded to banks from the definition of "broker" and "dealer."[68]

None of this should be surprising. The status quo is hard to change, and regulatory bodies do not surrender jurisdiction easily. As a result, the regulatory body historically established to regulate banks will predictably succeed in retaining much of its authority over banks, even when banks are engaged in securities activities that from a functional perspective should belong to the securities regulator.

"True" functional regulation would also assign similar activities to one regulator, rather than divide them between regulators based on only nominal differences in the description of the product or the legal status of the institution. Yet, in the case of banking

[66] See 15 U.S.C. § 78o-5(a)(1)(B), 15 U.S.C. § 78(c)(a)(34)(G), and 15 U.S.C. § 78o-5(g)(2).
[67] See 15 U.S.C. § 78(c)(a)(4),(5).
[68] See Kathleen Day, Regulators Battle Over Banks: 3 Agencies Say SEC Rules Overstep Securities-Trading Law, Wash. Post, July 3, 2001, at E3. Eventually, the SEC backed down in this particular skirmish and modified its original position. See Securities Exch. Act Release No. 34-44570 (July 18, 2001) and Securities Exchange Age Release No. 34-44291, 66 Fed. Reg. 27760 (2001).

regulation, three different federal regulators oversee banks: the Office of the Controller of the Currency ("OCC") supervises national banks; the Federal Reserve Board ("FRB") oversees state-chartered banks that are members of the Federal Reserve System and the Federal Deposit Insurance Corporation ("FDIC") supervises state-chartered banks that are not members of the Federal Reserve System but are federally insured.[69] Balkanization does not stop there. The line between "banks," with their three different regulators at the federal level, and "thrifts," which the Office of Thrift Supervision ("OTS") regulates, is again more formalistic than functional and reflects a political compromise more than a difference in activities.

Turning to securities regulation, one encounters an even stranger anomaly: the United States has one agency (the SEC) to regulate securities and another (the Commodities Future Trading Commission (CFTC)) to regulate futures. The world of derivatives is thereby divided between the two, with the SEC having jurisdiction over options, while the CFTC has jurisdiction over most other derivatives. No other nation assigns futures and securities regulation to different regulators. For a time, the SEC and CFTC both asserted jurisdiction over a third category of derivatives—swaps—, but in 2000 Congress resolved this dispute by placing their regulation largely beyond the reach of both agencies. Finally, some major financial sectors (for example, insurance and hedge funds) simply have no federal regulator. By any standard, the United States thus falls well short of a true system of functional regulation, because deregulation has placed much financial activity beyond the reach of any federal regulator.

Sensibly, the Blueprint proposes to rationalize this patchwork-quilt structure of fragmented authority through the merger and consolidation of agencies. Specifically, it

[69] This is all well described in the Blueprint. See Blueprint, supra note 62, at 31–41.

proposes both a merger of the SEC and CFTC and a merger of the OCC and the OTS. Alas, such mergers are rarely politically feasible, and to date, no commentator (to our knowledge) has predicted that these proposed mergers will actually occur.

Thus, although the Blueprint proposes that we move beyond functional regulation, the reality is that we have not yet approached even a system of functional regulation, as our existing financial regulatory structure is organized at least as much by institutional category as by functional activity. Disdaining a merely "functional" reorganization under which banking, insurance, and securities would each be governed by their own federal regulator, the Blueprint instead envisions a far more comprehensive consolidation of all these specialized regulators. Why? In its view, the problems with functional regulation are considerable:

> A functional approach to regulation exhibits several inadequacies, the most significant being the fact that no single regulator possesses all the information and authority necessary to monitor systemic risk, or the potential that events associated with financial institutions may trigger broad dislocation or a series of defaults that affect the financial system so significantly that the real economy is adversely affected.[70]

But beyond these concerns about systemic risk, the architects of the Blueprint were motivated by a deeper anxiety: regulatory reform is necessary to maintain the capital market competitiveness of the United States.[71] In short, the Blueprint is designed around two objectives: (1) the need to better address systemic risk and the possibility of a cascading series of defaults, and (2) the need to enhance capital market

[70] Blueprint, supra note 62, at 4.

[71] In particular, the Blueprint hypothesizes that the U.K. has enhanced its own competitiveness by regulatory reforms, adopted in 2000, that are principles-based and rely on self regulation for their implementation. Id. at 3.

competitiveness. As discussed later, the first concern is legitimate, but the second involves a more dubious logic.

2. The Consolidated Financial Services Regulator

A clear trend is today evident towards the unification of supervisory responsibilities for the regulation of banks, securities markets and insurance.[72] Beginning in Scandinavia in the late 1980s,[73] this trend has recently led the United Kingdom, Japan, Korea, Germany and much of Eastern Europe to move to a single regulator model.[74] Although there are now a number of precedents, the U.K. experience stands out as the most influential. It was the first major international market center to move to a unified regulator model,[75] and the Financial Services and Markets Act, adopted in 2000, went significantly beyond earlier precedents towards a "nearly universal regulator."[76] The Blueprint focuses on the U.K.'s experience because it believes that the U.K.'s adoption of a consolidated regulatory structure "enhanced the competitiveness of the U.K. economy."[77]

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[72] For recent overviews, see Ellis Ferran, Symposium: Do Financial Supermarkets Need Super-Regulators? Examining the United Kingdom's Experience in Adopting the Single Financial Regulator Model, 28 Brook. J. Int'l L. 257, 257–59 (2003); Jerry W. Markham, A Comparative Analysis of Consolidated and Functional Regulation: Super Regulator: A Comparative Analysis of Securities and Derivative Regulation in the United States, the United Kingdom, and Japan, 28 Brook. J. Int'l L. 319, 319–20 (2003); Giorgio Di Giorgio & Carmine D. Noia, Financial Market Regulation and Supervision: How Many Peaks for the Euro Area?, 28 Brook. J. Int'l L. 463, 469–78 (2003).

[73] Norway moved to an integrated regulatory agency in 1986, followed by Denmark in 1988, and Sweden in 1991. See D. Giorgio & D. Noia, supra note 72, at 469–478.

[74] See Bryan D. Stirewalt & Gary A. Gegenheimer, Consolidated Supervision of Banking Groups in the Former Soviet Republics: A Comparative Examination of the Emerging Trend in Emerging Markets, 23 Ann. Rev. Banking & Fin. L. 533, 548–49 (2004). As discussed later, in some countries (most notably Japan), the change seems more one of form than of substance, with little in fact changing. See Markham, supra note 72, at 383–393,396.

[75] See Ferran, supra note 72, at 258.

[76] See Schooner & Taylor, supra note 65, at 329. Schooner and Taylor also observe that the precursors to the U.K.'s centralized regulator, which were mainly in Scandinavia, had a "predominantly prudential focus." Id. at 331. That is, the unified new regulator was more a guardian of "safety and soundness" and less oriented toward consumer protection.

[77] Blueprint, supra note 62 at 3.

Yet it is unclear whether the U.K.'s recent reforms provide a legitimate prototype for the Blueprint's proposals. Here, the Blueprint may have doctored its history. By most accounts, the U.K.'s adoption of a single regulator model was "driven by country-specific factors,"[78] including the dismal failure of a prior regulatory system that relied heavily on self-regulatory bodies but became a political liability because of its inability to cope with a succession of serious scandals. Ironically, the financial history of the U.K. in the 1990s parallels that of the United States over the last decade. On the banking side, the U.K. experienced two major banking failures – the Bank of Credit and Commerce International ("BCCI") in 1991 and Barings in 1995. Each prompted an official inquiry that found lax supervision was at least a partial cause.[79]

Securities regulation in the U.K. came under even sharper criticism during the 1990s because of a series of financial scandals that were generally attributed to an "excessively fragmented regulatory infrastructure."[80] Under the then applicable law (the Financial Services Act of 1986), most regulatory powers were delegated to the Securities and Investments Board ("SIB"), which was a private body financed through a levy on market participants. However, the SIB did not itself directly regulate. Rather, it "set the overall framework of regulation," but delegated actual authority to second tier regulators, which consisted primarily of self-regulatory organizations ("SROs").[81] Persistent criticism focused on the inability or unwillingness of these SROs to protect consumers from fraud and misconduct.[82] Ultimately, the then chairman of the SIB, the most

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78 Ferran, supra note 72, at 259.
79 Id. at 261–262.
80 Id. at 265.
81 Id. at 266. The most important of these were the Securities and Futures Authority ("SFA"), the Investment Managers' Regulatory Organization ("IMRO"), and the Personal Investment Authority ("PIA").
82 Two scandals in particular stood out: the Robert Maxwell affair in which a prominent financier effectively embezzled the pension funds of his companies and a "pension mis-selling" controversy in which

important of the SROs, acknowledged that self-regulation had failed in the U.K. and seemed unable to restore investor confidence.[83] This acknowledgement set the stage for reform, and when a new Labour Government came into power at the end of the decade, one of its first major legislative acts (as it had promised in its election campaign) was to dismantle the former structure of SROs and replace it with a new and more powerful body, the Financial Services Authority ("FSA").

Despite the Blueprint's enthusiasm for the U.K.'s model, the structure that the Blueprint proposes for the U.S. more closely resembles the former U.K. system than the current one. Under the Blueprint's proposals, the securities regulator would be restricted to adopting general "principles-based" policies, which would be implemented and enforced by SROs.[84] Ironically, the Blueprint relies on the U.K. experience to endorse essentially the model that the U.K. concluded had failed.

3. <u>The "Twin Peaks" Model</u>

As the Blueprint recognizes, not all recent reforms have followed the U.K. model of a universal regulator. Some nations – most notably Australia and the Netherlands— instead have followed a "twin peaks" model that places responsibility for the "prudential regulation of relevant financial institutions" in one agency and supervision of "business conduct and consumer protection" in another.[85] The term "twin peaks" derives from the

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highly risky financial products were inappropriately sold to pension funds without adequate supervision or disclosure. Id. at 267–268.

[83] Id. at 268.

[84] See infra notes _ and accompanying text.

[85] Blueprint, supra note 62, at 3. For a recent discussion of the Australian reorganization, which began in 1996 (and thus preceded the U.K.), see Schooner & Taylor, supra note65, at 340–341. The Australian Securities and Investments Commission ("ASIC") is the "consumer protection" agency under this "twin peaks" approach, and the Australian Prudential Regulatory Authority ("APRA") supervises bank "safety and soundness." Still, the "twin peaks" model was not fully accepted in Australia as ASIC, the securities regulator, does retain supervisory jurisdiction over the "financial soundness" of investment banks. Thus, some element of functional regulation remains.

work of Michael Taylor, a British academic and former Bank of England official. In 1995, just before regulatory reform became a hot political issue in the U.K., he argued that financial regulation had two separate basic aims (or "twin peaks"): (1) "to ensure the soundness of the financial system," and (2) "to protect consumers from unscrupulous operators."[86] Taylor's work was original less in its proposal to separate "prudential" regulation from "business conduct" regulation than in its insistence upon the need to consolidate "responsibility for the financial soundness of all major financial institutions in a single agency."[87] Taylor apparently feared that if the Bank of England remained responsible for the prudential supervision of banks, its independence in setting interest rates might be compromised by its fear that raising interest rates would cause bank failures for which it would be blamed. In part for this reason, the eventual legislation shifted responsibility for bank supervision from the Bank of England to the FSA.

The Blueprint, itself, preferred a "twin peaks" model, and that model is far more compatible with the U.S.'s current institutional structure for financial regulation. But beyond these obvious points, the best argument for a "twin peaks" model involves conflict of interests and the differing culture of banks and securities regulators. It approaches the self-evident to note that a conflict exists between the consumer protection role of a universal regulator and its role as a "prudential" regulator intent on protecting the safety and soundness of the financial institution. The goal of consumer protection is most obviously advanced through deterrence and financial sanctions, but these can

[86] Michael Taylor, Twin Peaks: A Regulatory Structure for the New Century i (Centre for the Study of Financial Institutions 1995). For a brief review of Taylor's work, see Cynthia Crawford Lichtenstein, The Fed's New Model of Supervision for "Large Complex Banking Organizations": Coordinated Risk-Based Supervision of Financial Multinationals for International Financial Stability, 18 Transnat'l Law. 283, 295–296 (2005).

[87] Lichtenstein, supra note 86, at 295; Taylor, supra note 86, at 4.

deplete assets and ultimately threaten bank solvency. When only modest financial penalties are used, this conflict may sound more theoretical than real. But, the U.S. is distinctive in the severity of the penalties it imposes on financial institutions. In recent years, the SEC has imposed restitution and penalties exceeding $3 billion annually, and private plaintiffs received a record $17 billion in securities class action settlements in 2006.[88] Over a recent ten year period, some 2,400 securities class actions were filed and resulted in settlements of over $27 billion, with much of this cost (as in the *Enron* and *WorldCom* cases) being borne by investment banks.[89] If one agency were seeking both to protect consumers and guard the solvency of major financial institutions, it would face a difficult balancing act to achieve deterrence without threatening bank solvency, and it would risk a skeptical public concluding that it had been "captured" by its regulated firms.

Even in jurisdictions adopting the universal regulator model, the need to contemporaneously strengthen enforcement has been part of the reform package. Although the 2000 legislation in the U.K. did not adopt the "twin peaks" format, it did significantly strengthen the consumer protection role of its centralized regulator. The U.K.'s Financial Services and Markets Act, enacted in 2000, sets out four statutory objectives, with the final objective being the "reduction of financial crime."[90] According to Heidi Schooner and Michael Taylor, this represented "a major extension of the FSA's powers compared to the agencies it replaced,"[91] and it reflected a political response to the

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[88] See Coffee, Law and the Market: The Impact of Enforcement, 156 U. of Pa. L. Rev. 299 (2007) (discussing average annual SEC penalties and class action settlements).
[89] See Richard Booth, The End of the Securities Fraud Class Action as We Know It, 4 Berkeley Bus. L. J. 1, at 3 (2007).
[90] See Financial Services and Markets Act, 2000, c. 8, pt. 1, 6, http://www.opsi.gov.uk/ACTS/acts2000/pdf/ukpga_20000008_en.pdf.
[91] See Schooner & Taylor, supra note 65, at 335.

experience of weak enforcement by self-regulatory bodies, which had led to the creation of the FSA.[92] With probably unintended irony, Schooner and Taylor described this new statutory objective of reducing "financial crime" as the "one aspect of U.K. regulatory reform in which its proponents seem to have drawn direct inspiration from U.S. law and practice."[93] Conspicuously, the Blueprint ignores that "modernizing" financial regulation in other countries has generally meant strengthening enforcement.

4. A Preliminary Evaluation

Three preliminary conclusions merit emphasis:

First, whether the existing financial regulatory structure in the United States is considered "institutional" or "functional" in design, its leading deficiency seems evident: it invites regulatory arbitrage. Financial institutions position themselves to fall within the jurisdiction of the most accommodating regulator, and investment banks design new financial products so as to encounter the least regulatory oversight. Such arbitrage can be defended as desirable if one believes that regulators inherently overregulate, but not if one believes increased systemic risk is a valid concern (as the Blueprint appears to believe).

Second, the Blueprint's history of recent regulatory reform involves an element of historical fiction. The 2000 legislation in the U.K., which created the FSA as a nearly universal regulator, was not an attempt to introduce self-regulation by SROs, as the Blueprint seems to assume, but a sharp reaction by a Labour Government to the failures of self-regulation. Similarly, Japan's slow, back-and-forth movement in the direction of a

[92] Id.
[93] Id. at 335–36.

single regulator seems to have been motivated by an unending series of scandals and a desire to give its regulator at least the appearance of being less industry dominated.[94]

Third, the debate between the "universal" regulator and the "twin peaks" alternative should not obscure the fact that both are "superregulators" that have moved beyond "functional" regulation on the premise that, as the lines between banks, securities dealers, and insurers blur, so regulators should similarly converge. That idea will and should remain at the heart of the U.S. debate, even after many of the Blueprint's proposals are forgotten.

B. Defining the Roles of the "Twin Peaks" (Systemic Risk Regulator and Consumer Protector) – Who Should Do What?

The foregoing discussion has suggested why the SEC would not be an effective risk regulator. It has neither the specialized competence nor the organizational culture for the role. Its comparative advantage is enforcement, and thus its focus should be on transparency and consumer protection. Some also argue that "single purpose" agencies, such as the SEC, are more subject to regulatory capture than are broader or "general purpose" agencies.[95] To the extent that the Federal Reserve would have responsibility for all large financial institutions and would be expected to treat monitoring their capital adequacy and risk management practices as among its primary responsibilities, it does seem less subject to capture, because any failure would have high visibility and it would

[94] Japan has a history and a regulatory culture of economic management of its financial institutions through regulatory bodies that is entirely distinct from that of Europe or the United States. Although it has recently created a Financial Services Agency, observers contend that it remains committed to its traditional system of bureaucratic regulation that supports its large banks and discourages foreign competition. See Markham, supra note 72, at 383–92, 396. Nonetheless, scandals have been the primary force driving institutional change there too, and Japan's FSA was created at least in part because Japan's Ministry of Finance ("MOF") had become embarrassed by recurrent scandals.

[95] See Jonathan Macey, Organizational Design and Political Control of Administrative Agencies, 8 J. Law, Economics, and Organization 93 (1992). It can, of course, be argued which agency is more "single purpose" (the SEC or the Federal Reserve), but the latter does deal with a broader class of institutions in terms of their capital adequacy.

bear the blame. Still, this issue is largely academic because the SEC no longer has responsibility over any investment banks of substantial size.

The real issue then is defining the relationships between the two peaks so that neither overwhelms the other.

1. <u>The Systemic Risk Regulator ("SRR")</u>

Systemic risk is most easily defined as the risk of an inter-connected financial breakdown in the financial system – much like the proverbial chain of falling dominoes. The closely linked insolvencies of Lehman, AIG, Fannie Mae and Freddie Mac in the Fall of 2008 present a paradigm case. Were they not bailed out, other financial institutions were likely to have also failed. The key idea here is not that one financial institution is too big to fail, but rather that some institutions are too interconnected to permit any of them to fail, because they will drag the others down.

What should a system risk regulator be authorized to do? Among the obvious powers that it should have are the following:

a. <u>Authority to Limit the Leverage of Financial Institutions and Prescribe Mandatory Capital Adequacy Standards</u>. This authority would empower the SRR to prescribe minimum levels of capital and ceilings on leverage for all categories of financial institutions, including banks, insurance companies, hedge funds, money market funds, pension plans, and quasi-financial institutions (such as, for example, G.E. Capital). The standards would not need to be identical for all institutions and should be risk adjusted. The SRS should be authorized to require reductions in debt to equity ratios below existing levels, to consider off-balance sheet liabilities (including those of partially owned subsidiaries and also contractual agreements to repurchase or guarantee) in computing these tests and ratios (even if generally accepted accounting principles would not require their inclusion).

The SRR would focus its monitoring on the largest institutions in each financial class, leaving small institutions to be regulated and monitored by their primary regulator. For example, the SEC might require all hedge funds to register with it under the Investment Advisers Act of 1940, but hedge funds with a defined level of assets (say, $25 billion in assets) would be subject to the additional and overriding authority of the SSR.

b. <u>Authority to Approve, Restrict and Regulate Trading in New Financial Products</u>. By now, it has escaped no one's attention that one particular class of over-the-counter derivative (the credit default swap) grew exponentially over the last decade and was outside the jurisdiction of any regulatory agency. This was not accidental, as the Commodities Futures Modernization Act of 2000 deliberately placed over-the-counter derivatives beyond the general jurisdiction of both the SEC and the CFTC. The SRR would be responsible for monitoring the growth of new financial products and would be authorized to regulate such practices as the collateral or margin that counter-parties were required to post. Arguably, the SRR should be authorized to limit those eligible to trade such instruments and could bar or restrict the purchase of "naked" credit default swaps (although the possession of this authority would not mean that the SRR would have to exercise it, unless it saw an emergency developing).

c. <u>Authority to Mandate Clearing Houses</u>. Securities and options exchanges uniformly employ clearing houses to eliminate or mitigate credit risk. In contrast, when an investor trades in an over-the-counter derivative, it must accept both market risk (the risk that the investment will sour or price levels will change adversely) <u>and</u> credit risk (the risk that the counterparty will be unable to perform). Credit risk is the factor that necessitated the bailout of AIG, as its failure could have potentially led to a cascade of failures by other financial institutions if it defaulted on its swaps. Use of the clearing house should eliminate the need to bail out a future AIG because its responsibilities would fall on the clearing house to assume and the clearing house would monitor and limit the risk that its members assumed.

At present, several clearinghouses are in the process of development in the United States and Europe. The SRR would be the obvious body to oversee such clearing houses (and indeed the Federal Reserve was already instrumental in their formation). Otherwise, some clearing houses are likely to be formed under the SEC's supervision and some under the CFTC's, thus again permitting regulatory arbitrage to develop.

A final and complex question is whether competing clearing houses are desirable or whether they should be combined into a single centralized clearing house. This issue could also be given to the SRR.

d. Authority to Mandate Writedowns for Risky Assets. A real estate bubble was the starting point for the 2008 crisis. When any class of assets appreciates meteorically, the danger arises that on the eventual collapse in that overvalued market, the equity of the financial institution will be wiped out (or at the least so eroded as to create a crisis in investor confidence that denies that institution necessary financing). This tendency was palpably evident in the failure of Bear Stearns, Lehman, Fannie Mae and Freddie Mac. If the SRR regulator relies only on debt/equity ratios to protect capital adequacy, they will do little good and possibly provide only illusory protections. Any financial institution that is forced to writedown its investment in overpriced mortgage and real estate assets by

50% will necessarily breach mandated debt to equity ratios. The best answer to this problem is to authorize the SRR to take a proactive and countercyclical stance by requiring writedowns in risky asset classes (at least for regulatory purposes) prior to the typically much later point at which accountants will require such a writedown.

Candidly, it is an open question whether the SRS, the Federal Reserve, or any banking regulator would have the courage and political will to order such a writedown (or impose similar restraints on further acquisitions of such assets) while the bubble was still expanding. But Congress should at least arm its regulators with sufficient power and direct them to use it with vigor.

e. <u>Authority to Intervene to Prevent and Avert Liquidity Crises</u>. Financial institutions often face a mismatch between their assets and liabilities. They may invest in illiquid assets or make long-term loans, but their liabilities consist of short-term debt (such as commercial paper). Thus, regulating leverage ratios is not alone adequate to avoid a financial crisis, because the institution may suddenly experience a "run" (as its depositors flee) or be unable to roll over its commercial paper or other short-term debt. This problem is not unique to banks and can be encountered by hedge funds and private equity funds (as the Long Term Capital Management crisis showed). The SRR thus needs the authority to monitor liquidity problems at large financial institutions and direct institutions in specific cases to address such imbalances (either by selling assets, raising capital, or not relying on short-term debt).

From the foregoing description, it should be obvious that the only existing agency in a position to take on this assignment and act as an SRR is the Federal Reserve Board.

But it is less politically accountable than most other federal agencies, and this could give rise to some problems discussed below.

2. <u>The Consumer Protection and Transparency Agency</u>

The creation of an SSR would change little at the major federal agencies having responsibilities for investor protection. Although it might be desirable to merge the SEC and the CFTC, this is not essential. Because no momentum has yet developed for such a merger, I will not discuss it further at this time.

Currently, there are over 5,000 broker-dealers registered with the SEC. They would remain so registered, and the SRR would concern itself only with those few whose potential insolvency could destabilize the markets. The focus of the SEC's surveillance of broker-dealers is on consumer protection and market efficiency, and this would not be within the expertise of the Federal Reserve or any other potential SRR.

The SEC is also an experienced enforcement agency, while the Federal Reserve has little, if any, experience in this area. Further, the SEC understands disclosure issues and is a champion of transparency, whereas banking regulators start from the unstated premise that disclosures of risks or problems at a financial institution is undesirable because it might provoke a "run" on the bank. The SEC and the Controller of the Currency have long disagreed about what banks should disclose in the Management Discussion and Analysis that banks file with the SEC. Necessarily, this tension will continue.

3. <u>Resolving the Conflicts</u>

The SEC and the PCAOB have continued to favor "mark to market" accounting, while major banks have sought relief from the write-downs that it necessitates. Suppose then that in the future a SRR decided that "mark to market" accounting increased systemic risk. Could it determine that financial institutions should be spared from such an accounting regime on the ground that it was pro-cyclical? This is an issue that Congress should address in any legislation authorizing a SRR or enhancing the powers of the Federal Reserve. I would recommend that Congress maintain authority in the SEC to determine appropriate accounting policies, because, put simply, transparency has been the core value underlying our system of securities regulation.

But there are other areas where a SRR might well be entitled to overrule the SEC. Take, for example, the problem of short selling the stocks of financial institutions during a period of market stress. Although the SEC did ban short selling in financial stocks briefly in 2008, one can still imagine an occasion on which the SRR and the SEC might disagree. Here, transparency would not be an issue. Short selling is pro-cyclical, and a SRR could determine that it had the potential to destabilize and increase systemic risk. If it did so, its judgment should control.

These examples are given only by way of illustration, and the inevitability of conflicts between the two agencies is not assumed. The President's Working Group on Financial Markets has generally been able to work out disagreements through consultation and negotiation. Still, in any legislation, it would be desirable to identify those core policies (such as transparency and full disclosure) that the SRR could not override.

4. <u>The Failure of Quantitative Models</u>

If one lesson should have been learned from the 2008 crisis, it is that quantitative models, based on historical data, eventually and inevitably fail. Rates of defaults on mortgages can change (and swiftly), and housing markets do not invariably rise. In the popular vernacular, "black swans" both can occur and even become predominant. This does not mean that quantitative models should not be used, but that they need to be subjected to qualitative and judgmental overrides.

The weakness in quantitative models is particularly shown by the extraordinary disparity between the value at risk estimates (VaRs) reported by underwriters to the SEC and their eventual writedowns for mortgage-backed securities. Ferrell, Bethel and Hu report that for a selected group of major financial institutions the average ratio of asset writedowns as of August 20, 2008 to VaRs reported for 2006 was 291 to 1.[96] If financial institutions cannot accurately estimate their exposure for derivatives and risky assets, this undermines many of the critical assumptions underlying the Basel II Accords, and suggests that regulators cannot defer to the institutions' own risk models. Instead, they must reach their own judgments, and Congress should so instruct them.

C. <u>The Lessons of Madoff: Implications for the SEC, FINRA, and SIPC</u>

No time need be wasted pointing out that the SEC missed red flags and overlooked credible evidence in the Madoff scandal. Unfortunately, most Ponzi schemes do not get detected until it is too late. This implies that an ounce of prevention may be worth several pounds of penalties. More must be done to discourage and deter such schemes <u>ex ante</u>, and the focus cannot be only on catching them <u>ex post</u>.

From this perspective focused on prevention, rather than detection, the most obvious lesson is that the SEC's recent strong tilt towards deregulation contributed to, and enabled, the Madoff fraud in two important respects. First, Bernard L. Madoff Investment Securities LLC ("BMIS") was audited by a fly-by-night auditing firm with

[96] See Farrell, Bethel, and Hu, supra note 15, at 47.

only one active accountant who had neither registered with the Public Company Accounting Oversight Board ("PCAOB") nor even participated in New York State's peer review program for auditors. Yet, the Sarbanes-Oxley Act required broker-dealers to use a PCAOB-registered auditor.[97] Nonetheless, until the Madoff scandal exploded, the SEC repeatedly exempted privately held broker-dealers from the obligation to use such a PCAOB-registered auditor and permitted any accountant to suffice.[98] Others also exploited this exemption. For example, in the Bayou Hedge Fund fraud, which was the last major Ponzi scheme before Madoff, the promoters simply invented a fictitious auditing firm and forged certifications in its name. Had auditors been required to have been registered with PCAOB, this would not have been feasible because careful investors would have been able to detect that the fictitious firm was not registered.

Presumably, the SEC's rationale for this overbroad exemption was that privately held broker-dealers did not have public shareholders who needed protection. True, but they did have customers who have now been repeatedly victimized. At the end of 2008, the SEC quietly closed the barn door by failing to renew this exemption – but only after $50 billion worth of horses had been stolen.

A second and even more culpable SEC mistake continues to date. Under the Investment Advisers Act, investment advisers are required to maintain client funds or securities with a "qualified custodian."[99] In principle, this requirement should protect investors from Ponzi schemes, because an independent custodian would not permit the investment adviser to have access to the investors' funds. Indeed, for exactly this reason,

[97] See Section 17(e)(1) of the Securities Exchange Act of 1934, 15 U.S.C. § 78(q)(e)(1).
[98] See, e.g., Securities Exch. Act Rel. No. 34-54920 (Dec. 12, 2006).
[99] See Rule 206(4)-2 ("Custody of Funds or Securities of Clients By Investment Advisers"), 17 CFR § 275.206(4)-2.

mutual funds appear not to have experienced Ponzi-style frauds, which have occurred only in the case of hedge funds and investment advisers. Under Section 17(f) of the Investment Company Act, mutual funds must use a separate custodian. But in the case of investment advisors, the SEC permits the investment adviser to use an affiliated broker-dealer or bank as its qualified custodian. Thus, Madoff could and did use BMIS, his broker dealer firm, to serve as custodian for his investment adviser activities. The net result is that only a very tame watchdog monitors the investment adviser. Had an independent and honest custodian held the investors' funds, Madoff could not have recycled new investors' contributions to earlier investors, and the custodian would have noticed that Madoff was not actually trading. Other recent Ponzi schemes seem to have similarly sidestepped the need for an independent custodian. At Senate Banking Committee hearings on the Madoff debacle this January, the director of the SEC's Office of Compliance, Inspection and Examinations estimated that, out of the 11,300 investment advisers currently registered with the SEC, some 1,000 to 1,500 might similarly use an affiliated broker-dealer as their custodian. For investors, the SEC's tolerance for self-custodians makes the "qualified custodian" rule an illusory protection.

At present, the Madoff scandal has so shaken investor confidence in investment advisors that even the industry trade group for investment advisers (the Investment Advisers Association) has urged the SEC to adopt a rule requiring investment advisers to use an independent custodian. Unfortunately, one cannot therefore assume that the SEC will quickly produce such a rule. The SEC's staff knows that smaller investment advisers will oppose any rule that requires them to incur additional costs. Even if a reform rule is proposed, the staff may still overwhelm such a rule with exceptions (such as by permitting an independent custodian to use sub-custodians who are affiliated with the investment adviser). Congress should therefore direct it to require an independent custodian, across the board for mutual funds, hedge funds, and investment advisers.

The Madoff scandal exposes shortcomings not only at the SEC but elsewhere in related agencies. Over the last five years, the number of investment advisers has grown from roughly 7,500 to 11,300 – more than one third. Given this growth, it is becoming increasingly anomalous that there is no self-regulatory body (or "SRO") for investment advisers. Although FINRA may have overstated in its claim that it had no authority to investigate Madoff's investment adviser operations (because it could and should have examined BMIS's performance as the "qualified custodian" for Madoff's investment advisory activities), it still lacks authority to examine investment advisers. Some SRO (either FINRA or a new body) should have direct authority to oversee the investment adviser activities of an integrated broker-dealer firm.

Similarly, the Securities Investor Protection Corporation ("SIPC") continues to charge all broker-dealer firms the same nominal fee for insurance without any risk-adjustment. Were it to behave like a private insurer and charge more to riskier firms for insurance, these firms would have a greater incentive to adopt better internal controls against fraud. A broker-dealer that acted as a self-custodian for a related investment adviser would, for example, pay a higher insurance commission. Also, if higher fees were charged, more insurance (which is currently capped at $500,000 per account) could be provided to investors. When all broker-dealers are charged the same insurance premium, this subsidizes the riskier firms – i.e., the future Madoffs of the industry.

Finally, one of the most perplexing problems in the Madoff story is why, when the SEC finally forced Madoff to register as an investment adviser in 2006, it did not conduct an early examination of BMIS's books and records. Red flags were flying, as Madoff (1) used an unknown accountant, (2) served as his own self-custodian, (3) had apparently billions of dollars in customer accounts, (4) had long resisted registration, and (5) was the subject of plausible allegations of fraud from credible whistle-blowers. Cost constrained as the SEC may have been, the only conclusion that can be reached here is that the SEC has poor criteria for evaluating the relative risk of investment advisers. At a minimum, Congress should require a report by the SEC as to the criteria used to determine the priority of examinations <u>and</u> how the SEC proposes to change those criteria in light of the Madoff scandal.

Some have proposed eliminating the SEC's Office of Compliance, Inspection and Examinations and combining its activities with the Division of Investment Management. I do not see this as a panacea. Rather, it simply reshuffles the cards. The real problem is the criteria used to determine who should be examined. Credible allegations of fraud need to be directed to the compliance inspectors.

D. <u>Asset-Backed Securitizations: What Failed?</u>

Asset-backed securitizations represent a financial technology that failed. As outlined earlier, this failure seems principally attributable to a "moral hazard" problem that arose under which both loan originators and underwriters relaxed their lending standards and packaged non-creditworthy loans into portfolios, because both found that they could sell these portfolios at a high profit and on a global basis – at least so long as the debt securities carried an investment grade credit rating from an NRSRO credit rating agency.

Broad deregulatory rules contributed to this problem, and the two most important such SEC rules are Rules 3a-7 under the Investment Company Act[100] and Regulation AB.[101] Asset-backed securities (including CDOs) are typically issued by a special purpose vehicle (or "SPV") controlled by the promoter (which often may be an investment or commercial bank). This SPV would under ordinary circumstances be deemed an "investment company" and thus subjected to the demanding requirements of the Investment Company Act – but for Rule 3a-7. That rule exempts fixed-income securities issued by an SPV if, at the time of sale, the securities are rated in one of the four highest categories of investment quality by a "nationally recognized statistical rating organization" (or "NRSRO"). In essence, the SEC has delegated to the NRSROs (essentially, at the time at least, Moody's, S&P and Fitch) the ability exempt SPVs from the Investment Company Act. Similarly, Regulation AB governs the disclosure requirements for "asset-backed securities" (as such term is defined in Section 1101(c) of Regulation AB) in public offerings. Some have criticized Regulation AB for being more permissive than the federal housing agencies with respect to the need to document and verify the loans in a portfolio.[102] Because Regulation AB requires that the issuer not be an investment company (see Item 101(c)(2)(i) of Regulation AB), its availability (and thus expedited registration) also depends on an NRSRO investment grade rating.

[100] 17 CFR § 270.3a-7 ("Issuers of Asset-Backed Securities"). This exemption dates back to 1992.
[101] 17 CFR § 229.1100 et seq. ("Asset-Backed Securities"). Regulation AB was adopted in 2005, but reflects an earlier pattern of exemptions in no-action letters.
[102] See Mendales, supra note 18.

No suggestion is here intended that SPVs should be classified as "investment companies," but the need for the exemption given by Rule 3a-7 shows that the SEC has considerable leverage and could condition this exemption on alternative or additional factors beyond an NRSRO investment grade rating. The key point is that exemptions like Rule 3a-7 give the SEC a tool that they could use even without Congressional legislation – if the SEC was willing to take action.

What actions should be taken to respond to the deficiencies in asset-backed securitizations? I would suggest two basic steps: (1) curtail the "originate-and-distribute" model of lending that gave rise to the moral hazard problem, and (2) re-introduce due diligence into the securities offering process (both for public and Rule 144A offerings).

1. <u>Restricting the "Originate-and-Distribute" Model of Lending</u>. In a bubble, everyone expects that they can pass the assets on to the next buyer in the chain – "before the music stops." Thus, all tend to economize on due diligence and ignore signs that the assets are not creditworthy. This is because none expect to bear the costs of holding the financial assets to maturity.

Things were not always this way. When asset-backed securitizations began, the promoter usually issued various tranches of debt to finance its purchase of the mortgage assets, and these tranches differed in terms of seniority and maturity. The promoter would sell the senior most tranche in public offerings to risk averse public investors and retain some or all of the subordinated tranche, itself, as a signal of its confidence in the creditworthiness of the underlying assets. Over time, this practice of retaining the subordinated tranche withered away. In part, this was because hedge funds would take the risk of buying this riskier debt; in part, it was because the subordinated tranche could be included in more complex CDOs (where overcollateralization was the investor's principal protection), and finally it was because in a bubbly market, investors no longer looked for commitments or signals from the promoter.

Given this definition of the problem, the answer seems obvious: require the promoter to retain some portion of the subordinated tranche. This would incentivize it to buy only creditworthy financial assets and end the "moral hazard" problem.

To make this proposal truly effective, however, more must be done. The promoter would have to be denied the ability to hedge the risk on the subordinated tranche that it retained. Otherwise it might hedge that risk by buying a credit default swap on its own offering through an intermediary. But this is feasible. Even in the absence of legislation, the SEC could revise Rule 3a-7 to require, as a price of its exemption, that the promoter (either through the SPV or an affiliate) retain a specified percentage of the bottom, subordinated tranche (or, if there were no subordinated tranche, of the offering as a whole). Still, the cleaner, simpler way would be a direct legislative requirement of a minimum retention.

2. <u>Mandating Due Diligence</u>. One of the less noticed but more important developments associated with asset-backed securitization is the rapid decline in due diligence after 2000. Once investment banks did considerable due diligence on asset-backed securitizations, but they outsourced the work to specialized "due diligence" firms. These firms (of which Clayton Holdings, Inc. was the best known) would send squads of ten to fifteen loan reviewers to sample the loans in a securitized portfolio, checking credit scores and documentation. But the intensity of this due diligence review declined over

recent years. The Los Angeles Times quotes the CEO of Clayton Holdings to the effect that:

> "Early in the decade, a securities firm might have asked Clayton to review 25% to 40% of the sub-prime loans in a pool, compared with typically 10% in 2006…"[103]

The President of a leading rival due diligence firm, the Bohan Group, made an even more revealing comparison:

> "By contrast, loan buyers who kept the mortgages as an investment instead of packaging them into securities would have 50% to 100% of the loans examined, Bohan President Mark Hughes said."[104]

In short, lenders who retained the loans checked the borrowers carefully, but the investment banks decreased their investment in due diligence, making only a cursory effort by 2006. Again, this seems the natural consequence of an originate-and-distribute model.

The actual loan reviewers employed by these firms also told the above-quoted Los Angeles Times reporter that supervisors in these firms would often change documentation in order to avoid "red-flagging mortgages." These employees also report regularly encountering inflated documentation and "liar's loans," but, even when they rejected loans, "loan buyers often bought the rejected mortgages anyway."[105]

In short, even when the watchdog barked, no one at the investment banks truly listened. Over the last several years, due diligence practices long followed in the industry seemed to have been relaxed, ignored, or treated as a largely optional formality. That was also the conclusion of the President's Working Group on Financial Markets, which

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[103] See E. Scott Reckard, "Sub-Prime mortgage watchdogs kept on leash; loan checkers say their warnings of risk were met with indifference," Los Angeles Times, March 17, 2008 at C-1.
[104] Id.
[105] Id.

in early 2008 identified "a significant erosion of market discipline by those involved in the securitization process, including originators, underwriters, credit rating agencies, and global investors."[106]

Still, in the case of the investments bank, this erosion in due diligence may seem surprising. At least over the long-term, it seems contrary to their own self-interest. Four factors may explain their indifference: (1) an industry-wide decline in due diligence as the result of deregulatory reforms that have induced many underwriters to treat legal liability as simply a cost of doing business; (2) heightened conflicts of interest attributable to the underwriters' position as more a principal than an agent in structured finance offerings; (3) executive compensation formulas that reward short-term performance (coupled with increased lateral mobility in investment banking so that actors have less reason to consider the long-term); and (4) competitive pressure. Each is briefly examined below, and then I suggest some proposed reforms to address these problems.

i. The Decline of Due Diligence: A Short History

The Securities Act of 1933 adopted a "gatekeeper" theory of protection, in the belief that by imposing high potential liability on underwriters (and others), this would activate them to search for fraud and thereby protect investors. As the SEC wrote in 1998:

> "Congress recognized that underwriters occupied a unique position that enabled them to discover and compel disclosure of essential facts about the offering. Congress believed that subjecting underwriters to the liability provisions would provide the necessary incentive to ensure their careful investigations of the offering."[107]

[106] See President's Working Group on Financial Markets, Policy Statement on Financial Market Developments at 1 (March, 2008). (emphasis added). This report expressly notes that underwriters had the incentive to perform due diligence, but did not do so adequately.
[107] See SEC Release No. 7606A ("The Regulation of Securities Offerings"), 63 Fed. Reg. 67174, 67230 (Dec. 4 1998).

Specifically, Section 11 of the Securities Act of 1933 holds the underwriters (and certain other persons) liable for any material misrepresentation or omission in the registration statement, without requiring proof of scienter on the part of the underwriter or reliance by the plaintiff. This is a cause of action uniquely tilted in favor of the plaintiff, but then Section 11(b) creates a powerful incentive by establishing an affirmative defense under which any defendant (other than the issuer) will not be held liable if:

> "he had, after a reasonable investigation, reasonable ground to believe and did believe, at the time such registration statement became effective, that the statements made therein were true and that there was an omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading." 15 U.S.C. §77k (b)(3)(A). (emphasis added)

Interpreting this provision, the case law has long held that an underwriter must "exercise a high degree of care in investigation and independent verification of the company's representations." Feit v. Leasco Data Processing Equip. Corp., 332 F. Supp. 554, 582 (E.D.N.Y. 1971). Overall, the Second Circuit has observed that "no greater reliance in our self-regulatory system is placed on any single participant in the issuance of securities than upon the underwriter." Chris-Craft Indus., Inc. v. Piper Aircraft Corp., 480 F. 2d 341, 370 (2d Cir. 1973).

Each underwriter need not personally perform this investigation. It can be delegated to the managing underwriters and to counsel, and, more recently, the task has been outsourced to specialized experts, such as the "due diligence firms." The use of these firms was in fact strong evidence of the powerful economic incentive that Section 11(b) of the Securities Act created to exercise "due diligence."

But what then changed? Two different answers make sense and are complementary: First, many and probably most CDO debt offerings are sold pursuant to Rule 144A, and Section 11 does not apply to these exempt and unregistered offerings. Second, the SEC expedited the processing of registration statements to the point that due diligence has become infeasible. The latter development goes back nearly thirty years to the advent of "shelf registration" in the early 1980s. In order to expedite the ability of issuers to access the market and capitalize on advantageous market conditions, the SEC permitted issuers to register securities "for the shelf" – i.e., to permit the securities to be sold from time to time in the future, originally over a two year period (but today extended to a three year period).[108] Under this system, "takedowns" – i.e. actual sales under a shelf registration statement – can occur at any time without any need to return to the SEC for any further regulatory permission. Effectively, this telescoped a period that was often three or four months in the case of the traditional equity underwriting (i.e., the period between the filing of the registration statement and its "effectiveness," while the SEC reviewed the registration statement) to a period that might be a day or two, but could be only a matter of hours.

Today, because there is no longer any delay for SEC review in the case of an issuer eligible for shelf registration, an eligible issuer could determine to make an offering of debt or equity securities and in fact do so within a day's time. The original premise of this new approach was that eligible issuers would be "reporting entities" that filed continuous periodic disclosures (known as Form 10-Ks and Form 10-Qs) under the Securities Exchange Act of 1934. Underwriters, the SEC hoped, could do "continuing due diligence" on these issuers at the time they filed their periodic quarterly reports in

[108] See Rule 415 (17 C.F.R. §230.415)(2007).

preparation for a later, eventual public offering. This hope was probably never fully realized, but, more importantly, this premise never truly applied to debt offerings by issuers of asset-backed securities.

For bankruptcy and related reasons, the issuers of asset-backed issuers (such as CDOs backed by a pool of residential mortgages) are almost always "special purpose vehicles" (or "SPVs"), created for the single offering; they thus have no prior operating history and are not "reporting companies" under the Securities Exchange Act of 1934. To enable issuers of asset-backed securities to use shelf-registration and thus obtain immediate access to the capital markets, the SEC had to develop an alternative rationale. And it did! To use Form S-3 (which is a precondition for eligibility for shelf-regulation), an issuer of asset-backed securities must receive an "investment grade" rating from an "NRSRO" credit-rating agency.[109] Unfortunately, this requirement intensified the pressure that underwriters brought to bear on credit-ratings agencies, because unless the offering received an investment grade rating from at least one rating agency, the offering could not qualify for Form S-3 (and so might be delayed for an indefinite period of several months while its registration statement received full-scale SEC review). An obvious alternative to the use of an NRSRO investment grade rating as a condition for Form S-3 eligibility would be certification by "gatekeepers" to the SEC (i.e., attorneys and due diligence firms) of the work they performed. Form S-3 could still require an "investment grade" rating, but that it come from an NRSRO rating agency should not be mandatory.

[109] See Form S-3, General Instructions, IB5 ("Transaction Requirements – Offerings of Investment Grade Asset-Backed Securities").

After 2000, developments in litigation largely convinced underwriters that it was infeasible to expect to establish their due diligence defense. The key event was the WorldCom decision in 2004.[110] In WorldCom, the court effectively required the same degree of investigation for shelf-registered offerings as for traditional offerings, despite the compressed time frame and lack of underwriter involvement in the drafting of the registration statement. The Court asserted that its reading of the rule should not be onerous for underwriters because they could still perform due diligence prior to the offering by means of "continuous due diligence" (i.e., through participation by the underwriter in the drafting of the various Form 10-Ks and Form 10-Qs that are incorporated by reference into the shelf-registration).

For underwriters, the WorldCom decision was largely seen as a disaster. Their hopes – probably illusory in retrospect – were dashed that courts would soften Securities Act §11's requirements in light of the near impossibility of complying with due diligence responsibilities during the shortened time frames imposed by shelf registration. Some commentators had long (and properly) observed that the industry had essentially played "ostrich," hoping unrealistically that Rule 176 would protect them.[111] In WorldCom's wake, the SEC did propose some amendments to strengthen Rule 176 that would make it something closer to a safe harbor. But the SEC ultimately withdrew and did not adopt this proposal.

[110] In re WorldCom Inc. Securities Litigation, 346 F. Supp. 2d 628 (S.D.N.Y. 2004). The WorldCom decision denied the underwriters' motion for summary judgment based on their asserted due diligence defense, but never decided whether the defense could be successfully asserted at trial. The case settled before trial for approximately $6.2 billion.

[111] See Donald Langevoort, Deconstructing Section 11: Public Offering Liability in a Continuous Disclosure Environment, 63 Law and Contemporary Problems, US 62-63 (2000).

As the industry now found (as of late 2004) that token or formalistic efforts to satisfy Section 11 would not work, it faced a bleak choice. It could accept the risk of liability on shelf offerings or it could seek to slow them down to engage in full scale due diligence. Of course, different law firms and different investment banks could respond differently, but I am aware of no firms attempting truly substantial due diligence on asset-backed securitizations. Particularly in the case of structured finance, the business risk of Section 11 liability seemed acceptable. After all, investment grade bonds did not typically default or result in class action litigation, and Section 11 has a short statute of limitations (one year from the date that the plaintiffs are placed on "inquiry notice"). Hence, investment banks could rationally decide to proceed with structured finance offerings knowing that they would be legally exposed if the debt defaulted, in part because the period of their exposure would be brief. In the wake of the WorldCom decision, the dichotomy widened between the still extensive due diligence conducted in IPOs, and the minimal due diligence in shelf offerings. As discussed below, important business risks may have also motivated investment banks to decide not to slow down structured finance offerings for extended due diligence.

The bottom line here then is that, at least in the case of asset-backed shelf offerings, investment banks ceased to perform the due diligence intended by Congress, but instead accepted the risk of liability as a cost of doing business in this context. But that is only the beginning of the story.

ii. Conflicts of Interest

Traditionally, the investment bank in a public offering played a gatekeeping role, vetting the company and serving as an agent both for the prospective investors (who are also its clients) and the corporate issuer. Because it had clients on both sides of the offering, the underwriter's relationship with the issuer was somewhat adversarial, as its counsel scrutinized and tested the issuer's draft registration statement. But structured finance is different. In these offerings, there is no corporate issuer, but only a "special purpose vehicle" (or "SPV") typically established by the investment bank. The product – residential home mortgages – is purchased by the investment bank from loan originators and may be held in inventory by the investment bank for some period until the offering can be effected. In part for this reason, the investment bank will logically want to expedite the offering in order to minimize the period that it must hold the purchased mortgages in its own inventory and at its own risk.

Whereas in an IPO the underwriter (at least in theory) is acting as a watchdog testing the quality of the issuer's disclosures, the situation is obviously different in an assets-backed securities offering that the underwriter is structuring itself. It can hardly be its own watchdog. Thus, the quality of disclosure may suffer. Reports have circulated that some due diligence firms advised their underwriters that the majority of mortgages loans in some securitized portfolio were "exception" loans – i.e. loans outside the bank's normal guidelines.[112] But the registration statement disclosed only that the portfolio included a "significant" or "substantial" number of such loans, not that it was predominantly composed of such loans. This is inferior and materially deficient disclosure, and it seems attributable to the built-in conflicts in this process.

iii. Executive Compensation

[112] See, e.g., Vikas Bajaj and Jenny Anderson, "Inquiry Focuses on Withholding of Data on Loans," New York Times, January 12, 2008 at A-1.

Investment bankers are typically paid year-end bonuses that are a multiple of their salaries. These bonuses are based on successful completion of fee-generating deals during the year. But a deal that generates significant income in Year One could eventually generate significant liability in Year Two or Three. In this light, the year-end bonus system may result in a short-term focus that ignores or overly discounts longer-term risks.

Moreover, high lateral mobility characterizes investment banking firms, meaning that the individual investment banker may not identify with the firm's longer-term interests. In short, investment banks may face serious agency costs problems, which may partly explain their willingness to acquire risky mortgage portfolios without adequate investigation of the collateral.

iv. Competitive Pressure

Citigroup CEO Charles Prince's now famous observation that "when the music is playing, you've got to get up and dance" is principally a recognition of the impact of competitive pressure. If investors are clamoring for "investment grade" CDOs (as they were in 2004-2006), an investment bank understands that if it does not offer a steady supply of transactions, its investors will go elsewhere – and possibly not return. Thus, to hold onto a profitable franchise, investment banks sought to maintain a steady pipeline of transactions; this in turn lead them to seek to lock in sources of supply. Accordingly, they made clear to loan originators their willingness to buy all the "product" that the latter could supply. Some investment banks even sought billion dollar promises from loan originators of a minimum amount of product. Loan originators quickly realized that due diligence was now a charade (even if it had not been in the past) because the "securitizing" investment banks were competing fiercely for supply. In a market where the demand seemed inexhaustible, the real issue was obtaining supply, and investment banks spent little time worrying about due diligence or rejecting a supply that was already too scarce for their anticipated needs.

v. Providing Time for Due Diligence

The business model for structured finance is today broken. Underwriters and credit rating agencies have lost much of their credibility. Until structured finance can regain credibility, housing finance in the United States will remain in scarce supply.

The first lesson to be learned is that underwriters cannot be trusted to perform serious due diligence when they are in effect selling their own inventory and are under severe time pressure. The second lesson is that because expedited shelf registration is inconsistent with meaningful due diligence, the process of underwriting structured finance offerings needs to be slowed down to permit more serious due diligence. Shelf registration and abbreviated time schedules may be appropriate for seasoned corporate issuers whose periodic filings are incorporated by reference into the registration statement, but it makes less sense in the case of a "special purpose vehicle" that has been created by the underwriter solely as a vehicle by which to sell asset-backed securities. Offerings by seasoned issuers and by special purpose entities are very different and need not march to the same drummer (or the same timetable).

An offering process for structured finance that was credible would look very different than the process we have recently observed. First, a key role would be played by the due diligence firms, but their reports would not go only to the underwriter (who appears to have at time ignored them). Instead, without editing or filtering, their reports would also go directly to the credit-rating agency. Indeed, the rating agency would specify what it would want to see covered by the due diligence firm's report. Some dialogue between the rating agency and the due diligence firm would be built into the process, and ideally their exchange would be outside the presence of the underwriter (who would still pay for the due diligence firm's services). At a minimum, the NRSRO rating agencies should require full access to such due diligence reports as a condition of providing a rating (this is a principle with which these firms agree, but may find it difficult to enforce in the absence of a binding rule).

To enable serious due diligence to take place, one approach would be to provide that structured finance offerings should not qualify for Form S-3 (or for any similar form of expedited SEC review). If the process can occur in a day, the pressures on all the participants to meet an impossible schedule will ensure that little serious investigation of the collateral's quality will occur. An alternative (or complementary approach) would be to direct the SEC to revise Regulation AB to incorporate greater verification by the underwriter (and thus its agents) of the quality of the underlying financial assets.

Does this sound unrealistic? Interestingly, the key element in this proposal – that that due diligence firm's report go to the credit rating agency – is an important element in the settlement negotiated in 2008 by New York State Attorney General Cuomo and the credit rating agencies.[113]

The second element of this proposal – i.e., that the process be slowed to permit some dialogue and questioning of the due diligence firm's findings – will be more controversial. It will be argued that delay will place American underwriters at a

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[113] See Aaron Lucchetti, "Big Credit-Rating Firms Agree to Reforms," The Wall Street Journal, June 6, 2008 at p. C-3.

competitive disadvantage to European rivals and that offerings will migrate to Europe. But today, structured finance is moribund on both sides of the Atlantic. To revive it, credibility must be restored to the due diligence process. Instantaneous due diligence is in the last analysis simply a contradiction in terms. Time and effort are necessary if the quality of the collateral is to be verified – and if investors are to perceive that a serious effort to protect their interests is occurring.

E. Rehabilitating the Gatekeepers

Credit rating agencies remain the critical gatekeeper whose performance must be improved if structured finance through private offerings (i.e., without government guarantees) is to become viable again. As already noted, credit rating agencies face a concentrated market in which they are vulnerable to pressure from underwriters and active competition for the rating business.

At present, credit rating agencies face little liability and perform little verification. Rather, they state explicitly that they are assuming the accuracy of the issuer's representations. The only force that can feasibly induce them to conduct or obtain verification is the threat of securities law liability. Although that threat has been historically non-existent, it can be legislatively augmented. The credit rating agency does make a statement (i.e., its rating) on which the purchasers of debt securities do typically rely. Thus, potential liability does exist under Rule 10b-5 to the extent that it makes a statement in connection with a purchase or sale of a security. The difficult problem is that a defendant is only liable under Rule 10b-5 if it makes a material misrepresentation or omission with scienter. In my judgment, there are few cases, if any, in which the rating agencies actually know of the fraud. But, under Rule 10b-5, a rating agency can be held liable if it acted "recklessly."

Accordingly, I would proposed that Congress expressly define the standard of "recklessness" that creates liability under Rule 10b-5 for a credit rating agency to be the issuance of a rating when the rating agency knowingly or recklessly is aware of facts indicating that reasonable efforts have not been conducted to verify the essential facts relied upon by its ratings methodology. A safe harbor could be created for circumstances in which the ratings agency receives written certification from a "due diligence" firm, independent of the promoter, indicating that it has conducted sampling procedures that lead it to believe in the accuracy of the facts or estimates asserted by the promoter. The goal of this strategy is not to impose massive liabilities on rating agencies, but to make it unavoidable that someone (either the rating agency or the due diligence firm) conduct reasonable verification. To be sure, this proposal would involve increased costs to conduct such due diligence (which either the issuer or the underwriter would be compelled to assume). But these costs are several orders of magnitude below the costs that the collapse of the structured finance market has imposed on the American taxpayer.

Part III. CONCLUSIONS

1. The current financial crisis – including the collapse of the U.S. real estate market, the insolvency of the major U.S. investment banks, and the record decline in the stock market – was not the product of investor mania or the classic demand-driven bubble, but rather was the product of the excesses of an "originate-and-distribute" business model that both loan originators and investment banks followed to the brink of disaster – and beyond. Under this business model, financial institutions abandoned

discipline and knowingly made non-creditworthy loans because they did not expect to hold the resulting financial assets for long enough to matter.

2. The “moral hazard” problem that resulted was compounded by deregulatory policies at the SEC (and elsewhere) that permitted investment banks to increase their leverage rapidly between 2004 and 2006, while also reducing their level of diversification. Under the Consolidated Supervised Entity (“CSE”) Program, the SEC essentially deferred to self-regulation by the five largest investment banks, who woefully underestimated their exposure to risk.

3. This episode shows (if there ever was doubt) that in an environment of intense competition and under the pressure of equity-based executive compensation systems that are extraordinarily short-term oriented, self-regulation does not work.

4. As a result, all financial institutions that are “too big to fail” need to be subjected to prudential financial supervision and a common (although risk-adjusted) standard. This can only be done by the Federal Reserve Board, which should be given authority to regulate the capital adequacy, safety and soundness, and risk management practices of all large financial institutions.

5. Incident to making the Federal Reserve the systemic risk regulator for the U.S. economy, it should receive legislative authority to: (1) establish ceilings on debt/equity ratios and otherwise restrict leverage at all major financial institutions (including banks, hedge funds, money market funds, insurance companies, and pension plans, as well as financial subsidiaries of industrial corporations); (2) supervise and restrict the design, and trading of new financial products (particularly including over-the-counter derivatives); (3) mandate the use of clearinghouses, to supervise them, and in its discretion to require

their consolidation; (4) require the writedown of risky assets by financial institutions, regardless of whether required by accounting rule; and (5) to prevent liquidate crises by restricting the issuance of short-term debt.

6. Under the "twin peaks" model, the systemic risk regulatory agency would have broad powers, but not the power to override the consumer protection and transparency policies of the SEC. Too often bank regulators and banks have engaged in a conspiracy of silence to hide problems, lest they alarm investors. For that reason, some SEC responsibilities should not be subordinated to the authority of the Federal Reserve.

7. As a financial technology, asset-backed securitizations have decisively failed. To restore credibility to this marketplace, sponsors must abandon their "originate-and-distribute" business model and instead commit to retain a significant portion of the most subordinated tranche. Only if the promoter, itself, holds a share of the weakest class of debt that it is issuing (and on an unhedged basis) will there be a sufficient signal of commitment to restore credibility.

8. Credit rating agencies must be compelled either to conduct reasonable verification of the key facts that they are assuming in their ratings methodology or to obtain such verification from professionals independent of the issuer. For this obligation to be meaningful, it must be backstopped by a standard of liability specifically designed to apply to credit-rating agencies.