

COLLATERALIZED EXPLOSIVE DEVICES: WHY SECURITIES REGULATION FAILED TO PREVENT THE CDO MELTDOWN, AND HOW TO FIX IT

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In 2007 and 2008, financial markets around the world exploded. In this Article, the author analyzes this meltdown and discusses proposals for preventing similar crises. First, the author investigates the failure of the credit rating agencies to deal with collateralized debt obligations (CDOs). Second, the author explores the current economic crisis by looking to past financial downturns and the failure of regulations to achieve sufficient transparency. Third, the author discusses proposals to remedy the crisis. Fourth, the author proposes his own solution, which would subject CDOs to stricter requirements under the aegis of securities regulation. This proposal includes (i) an extension of antifraud provisions of the securities laws to CDOs, (ii) increased regulation of and mandated standards for the rating agencies, and (iii) an assignment of rights and liabilities to the rating agencies in order to effectively enforce the new regulations. Finally, the author looks to the future and proposes that the government require extensive disclosure for new types of securities.

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INTRODUCTION

One of the important functions of law review articles is to lock the barn door after the horse has been stolen—i.e., to analyze the causes of a breakdown in the intended function of protective law after its occurrence, and to propose changes in the law to prevent it from recurring.

This is particularly important in the financial markets, where one of the few things that is certain is that there will be more horsing around.¹ It is important while still *in mediis rebus* to propose measures that will benefit from painful experience to prevent such events in the future, or at least to mitigate their effects.

The spark that set off the 2007–2008 explosion in the world financial markets was the failure of the market for collateralized debt obligations (CDOs),² beginning with a historically minor component of that market—the segment based on subprime mortgages.³ Though securitization in general has been criticized as legally questionable under bankruptcy and commercial law principles,⁴ problems of this kind did not play a major role in the current breakdown. Moreover, although most proposals for dealing with the failure of the market for CDOs are based on classic bank regulation—e.g., capital requirements, restrictions on excessive debt, etc.⁵—the crisis began and has been fueled by the fact that CDOs with top ratings turned out to be worth far less than their face amounts—and in the end proved hard to value at all.⁶ This failure in transparency is a classic securities law problem,⁷ but none of the major analyses to date have pointed to the role that the failure of securities regulation played in the blowup. Nonetheless, the underlying issues that led to the meltdown can best be addressed by appropriate modification of the securities laws.⁸

The key to the problem is the fact that unregulated ratings for asset-backed securities⁹ became proxies for the full disclosure required by se-

1. See *infra* text accompanying notes 224–28 (concerning repeated failings of market participants such as Criimi Mae to learn that packages of toxic loans, regardless of hedging strategies, remain toxic).

2. CDOs represent a larger set of securities based on pools of asset-backed securities and other debt instruments such as individual mortgages and other types of income-producing collateral such as commercial mortgages. See *Slayton v. Am. Express Co.*, 460 F.3d 215, 219 n.3 (2d Cir. 2006). They originated as securities based on cash flows from portfolios of junk bonds in 1987. See Richard Tomlinson & David Evans, *A Ratings Charade?*, SEATTLE TIMES, Aug. 12, 2007, at H1. During the 1990s, they became natural vehicles to issue securities based on pools of collateralized mortgage obligations (CMOs), which in turn were based on pools of mortgages that paid shares of principal and interest payments on the mortgages to investors. They were extended to include CMO securities and other securities based on pools of obligations such as car and student loans, and derivatives based on these securities such as credit swaps. See *infra* text accompanying note 10; see also Roger Lowenstein, *Triple-A Failure*, N.Y. TIMES MAG., Apr. 27, 2008, at 36, 40.

3. Subprime mortgages are mortgages that fail to meet the credit requirements of the federal institutions such as the Federal Housing Administration, Ginnie Mae, Fannie Mae, and Freddie Mac, usually because of the mortgagors' poor credit histories. See Lowenstein, *supra* note 2, at 38.

4. See, e.g., Kenneth C. Kettering, *Securitization and Its Discontents: The Dynamics of Financial Product Development*, 29 CARDOZO L. REV. 1553, 1581 (2008).

5. See, e.g., Secretary Henry M. Paulson, Jr., Remarks on Recommendations from the President's Working Group on Financial Markets (Mar. 13, 2008), <http://www.treasury.gov/press/releases/hp872.htm>.

6. See Lowenstein, *supra* note 2, at 38–39.

7. See, e.g., Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 HARV. L. REV. 1197, 1199 (1999).

8. See *infra* Part III.D.

9. This Article adopts the SEC definition of “asset-backed security” as a security that pays its investors from cash flows from a discrete pool of financial assets such as mortgages. See 17 C.F.R.

curities law. Thus, when they were repackaged into more complex CDOs or used indirectly to create derivative obligations such as default swaps,¹⁰ participants in transactions and institutions holding the securities as part of their required capitalization relied on the high ratings given to component asset-backed securities rather than looking at the assets underlying them.

Ironically, the Securities and Exchange Commission (SEC) bears part of the blame for the reliance on ratings and thus for the CDO crisis. Beginning in the 1970s, the SEC encouraged the use of ratings for asset-backed securities by unregulated credit rating agencies as a surrogate for the full disclosure that securities law normally mandates to insure transparency for publicly issued corporate debt.¹¹ As the market for asset-backed securities grew exponentially during the 1980s, Congress gave the rating system a further assist with the Secondary Mortgage Market Enhancement Act of 1984 (SMMEA).¹²

Neither the SMMEA, nor the SEC interim rulings that were eventually codified in Regulation AB,¹³ nor the Credit Rating Agency Reform Act of 2006 (CRARA),¹⁴ passed by Congress in an attempt to increase competition among rating agencies, have materially dealt with the lack of CDO transparency that led to the current crisis. Proposals made by the U.S. Treasury in response to the crisis not only fail to deal with its underlying causes, but, by pulling some of the SEC's existing teeth, would actually be counterproductive.¹⁵

Ironically, the failure of mortgage-backed securities issued during the 1920s helped to give birth to the federal securities laws.¹⁶ Securities laws protect investors with carefully structured disclosures by issuers of securities,¹⁷ both on initial offerings and on a periodic basis, to indicate how changes in circumstances have affected the issuers.¹⁸ The disclosures concerning CDOs, however, failed to warn of weaknesses in the assets on which they rested. Their failure, beginning in 2006 and reaching dimen-

§ 229.1101(c)(1) (2008); Asset-Backed Securities, Exchange Act Release Nos. 33-8518, 34-50905, 84 SEC Docket 1624 (Dec. 22, 2004).

10. In a default swap agreement, one party guarantees the payment of a debt security held by another in exchange for a fee. A "synthetic" CDO is a security based on a package of swap obligations guarantying payment on "cash flow" CDOs composed of actual asset-backed securities. See Frank Partnoy & David A. Skeel, Jr., *The Promise and Perils of Credit Derivatives*, 75 U. CIN. L. REV. 1019, 1022 (2007).

11. See *infra* text accompanying notes 41–44.

12. Pub. L. No. 98-440, 98 Stat. 1689 (1984).

13. 17 C.F.R. §§ 229.1101, 240.13a-1.

14. Pub. L. No. 109-291, 120 Stat. 1327 (codified at 15 U.S.C. § 78o-7 (2006)).

15. See William Donaldson et al., Op-Ed., *Muzzling the Watchdog*, N.Y. TIMES, Apr. 29, 2008, at A19.

16. See BERNARD J. REIS, FALSE SECURITY: THE BETRAYAL OF THE AMERICAN INVESTOR 58–84 (1937).

17. By "structured disclosure," this Article refers to the required disclosure of information that the SEC deems material both in the initial registration of securities and at regular time intervals, on detailed forms prescribed by the SEC such as Form S-K. See, e.g., 17 C.F.R. §§ 229.10–802.

18. See, e.g., MARC I. STEINBERG, SECURITIES REGULATION § 1.01 (4th ed. 2004).

sions that have shaken global markets since then, was based largely on the lack of transparency in the market—exactly what the securities laws were designed to create.

In brief, the CDO market failed because its quality controls expanded beyond the scope of federal securities regulation, permitting irresponsible and in some cases fraudulent practices concerning financial instruments underlying asset-backed securities and their derivatives. This happened because a system largely outside the bounds of securities regulation—the ratings issued by private rating agencies—largely displaced the structured disclosure requirements of securities law as the primary basis for investors' purchase of the securities either as direct investments or as components of derivative securities.¹⁹ The rating system, fraught with conflict of interest because rating agencies were paid by the issuers of the securities they rated, failed to detect the increasing risk in debt instruments used as the ultimate collateral for the CDO system. Although the rating agencies' failure to give advance warning of the Enron disaster caused a limited attempt at reform in the guise of CRARA,²⁰ this legislation failed to address the central problems that led to the CDO meltdown and in fact still restrains the SEC from meaningful efforts to cope with them.

This Article argues that securities regulation offers the most effective and least burdensome response to the present crisis and a vaccine against another plague of comparable magnitude. The federal securities laws rely on disclosure more than on institutional constraints, following Justice Brandeis's observation that "[s]unlight is said to be the best of disinfectants,"²¹ rather than judging the merit of registered securities.²² The best response both to the present crisis and to prevent future crises of this nature is to let the sun shine in by giving new teeth to the securities laws. This should make the rating process itself more transparent, so that a rating is more than a "black box" representing the unregulated label placed by a credit rating agency on the creditworthiness of securities

19. The principles of securitization have received cogent criticism based on the potential vulnerability of securitized debt instruments to trustees in bankruptcy for the transferors of debt instruments into pools of income-producing assets under debtor-creditor law. See David Gray Carlson, *The Rotten Foundations of Securitization*, 39 WM. & MARY L. REV. 1055, 1100–07 (1998); Kettering, *supra* note 4, at 1556–61; Lois R. Lupica, *Asset Securitization: The Unsecured Creditor's Perspective*, 76 TEX. L. REV. 595, 616–50 (1998). The present meltdown of the world market for CDOs, however, is not due to the theoretical weakness of these instruments under debtor-creditor law, but to the fact that the debt instruments that ultimately secure them—mortgages and other types of secured loans—have defaulted in far larger than expected numbers. See Lowenstein, *supra* note 2, at 38, 41.

20. See *infra* text accompanying notes 190–94.

21. LOUIS D. BRANDEIS, *OTHER PEOPLE'S MONEY: AND HOW THE BANKERS USE IT* 92 (1914) (often misquoted as "Sunlight is the best disinfectant").

22. State "blue sky" laws, on the other hand, often regulate the quality of securities. See *Hall v. Geiger-Jones Co.*, 242 U.S. 539, 540–41 (1917). Although federal securities law focuses on the quality of disclosure rather than the quality of securities, it does touch on the quality of securities in regulating the quality of securities broker-dealers may hold pursuant to capital requirements. See 17 C.F.R. § 240.15c3-1.

so complex that even financial institutions cannot use traditional securities disclosure to evaluate the risks embodied by a CDO. Doing so will also impose fewer costs on the public than other approaches that would institutionalize emergency measures taken by the Federal Reserve and Treasury in the current crisis to prevent market collapse by acting as lenders of last resort.²³

Part I of this Article describes the co-evolution of the market for asset-backed securities and their derivatives and the rating system as well as why the rating system became more central to CDOs than it is to the issuance of conventional securities. Part II focuses on securities regulation and analyzes why it failed to achieve the kind of transparency in the CDO market that it provides in more conventional securities markets. Part III discusses proposals to prevent a market failure like that of the CDO crisis from recurring. It concludes that the best approach to this problem, contrary to proposals advanced by the U.S. Treasury, is to modify securities law by taking rating agencies into its disclosure system. This approach goes well beyond proposals made by the SEC under the aegis of CRARA. It would enable market forces to minimize future risks, while minimizing costs that would be imposed by schemes of institutional regulation such as that proposed by the Treasury. Part IV suggests a more general approach to dealing with new types of securities whose level of risk may be initially uncertain. Again, it focuses on the importance of transparency, so that markets can appreciate the value and risks attaching to securities regardless of their complexity.

I. HOW A USEFUL DEVICE EVOLVED INTO A TRAIN WRECK

A. *Origins of Securitization*

In the beginning, Congress created Fannie Mae.²⁴ The Great Depression had closed many traditional housing lenders, chiefly banks and savings and loan associations, and those left standing restricted their mortgage lending. To deal with the housing crisis, Congress passed the National Housing Act in 1934, which established the Federal Housing Administration (FHA) and authorized the creation of one or more national housing associations to encourage mortgage lending by creating a secondary market on which mortgage originators could sell mortgages.²⁵ Fannie Mae was created to fill this role in 1938. It had the statutory right

23. See Steven L. Schwarcz, *Markets, Systemic Risk, and the Subprime Mortgage Crisis* 8 (Duke Law Sch. Legal Studies, Research Paper No. 190, March 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1102326.

24. "Fannie Mae" is the popular name given to the Federal National Mortgage Association, created by the Federal National Mortgage Association Charter Act, currently codified at 12 U.S.C. §§ 1716–1723 (2006).

25. National Housing Act, Pub. L. No. 73-479, 48 Stat. 1246 (1934). The drafters of the act were trying to recreate a secondary mortgage market, which had existed during the 1920s but collapsed with the Great Depression. See REIS, *supra* note 16, at 58–84.

not only to purchase mortgages, but also to resell them.²⁶ Originally, it could purchase only loans insured by the FHA, but the demand for housing that followed World War II and the subsequent baby boom led Congress to enable Fannie Mae to purchase Veterans' Administration (VA) mortgages.²⁷

In 1966, the U.S. Treasury faced a major problem: costs and interest rates were rising rapidly, and Congress balked at increasing the limit on the national debt, then set at the breath-taking amount of \$330 billion.²⁸ After interim measures such as delaying payment on federal accounts, Congress, in its need, turned to mortgage-backed securities.²⁹ These were created by Fannie Mae, which pooled mortgages that it had purchased and placed them in trusts. The trusts then sold participation certificates representing fractional percentages of each pool and passed mortgagors' principal and interest payments through to investors in proportion to the interest in each pool that they had purchased.³⁰ The obligations represented by the participations were considered those of the mortgagors and therefore not counted toward the federal debt,³¹ so the Treasury had simultaneously introduced mortgage-backed securities and off-balance sheet financing.

Interestingly, this was a not a novelty but a reinvention. Mortgage-backed securities were sold during the earlier Gilded Age of the 1880s.³² They vanished after the Panic of 1893, and reappeared as "group series certificates" during the 1920s, consisting of participations in pools of mortgages sold to investors. This market failed again during the Great Depression of the 1930s, when the Pecora Committee examined them in the hearings that led to enactment of the Securities Act of 1933 (1933 Act).³³ They then lingered among the unquiet dead until the Johnson Administration revived them to help finance the Vietnam War.

Two years later, facing further budgetary constraints, Congress decided to take more exposure off the federal balance sheet by splitting Fannie Mae into two corporations, both federally chartered.³⁴ One re-

26. See *Anchor Sav. Bank, FSB v. United States*, 81 Fed. Cl. 1, 16 (2008).

27. Housing Act of 1948, Pub. L. No. 80-901, § 201, 62 Stat. 1268, 1275 (amending the National Housing Act).

28. See John H. Allan, *Treasury Facing Dilemma on Debt*, N.Y. TIMES, Nov. 13, 1966, at 1.

29. *Id.*

30. It has been frequently and erroneously been stated that Ginnie Mae began securitization in 1970. See, e.g., STEVEN L. SCHWARCZ, *STRUCTURED FINANCE* § 1:2 (3d ed. 2002). Actually, Ginnie Mae has never issued but only guaranteed mortgage-backed securities, and opinions of the U.S. Attorney General on the legality of these securities indicate that Fannie Mae, before its breakup, was selling such securities at least as early as 1966. See 42 Op. Att'y Gen. 323-25 (1966); 42 Op. Att'y Gen. 341-45 (1967).

31. See Allan, *supra* note 28.

32. CHRISTINE A. PAVEL, *SECURITIZATION: THE ANALYSIS AND DEVELOPMENT OF THE LOAN-BASED/ASSET-BACKED SECURITIES MARKETS* 3 (1989).

33. See *id.* at 183-85; REIS, *supra* note 16, at 58-84.

34. Housing and Urban Development Act of 1968, Pub. L. No. 90-448, § 801, 82 Stat. 476, 536 (codified at 12 U.S.C. § 1716b (2006)).

tained the Fannie Mae name and charter, but was privatized—i.e., its stock was sold to the general public. It continued to purchase FHA and VA mortgages, plus conventional mortgages that met specified requirements, and received statutory authority to package mortgages into pools that were conveyed to trusts that sold participation interests in the form of mortgage-backed securities.³⁵

The other half of the original Fannie Mae became the Government National Mortgage Association (Ginnie Mae), which remains within the federal government.³⁶ Its charter authorizes it to approve mortgage lenders that meet its standards, to approve pools assembled from pools of mortgages insured by the FHA or VA, and to guaranty payments to investors from mortgage-backed securities based on payments on the underlying mortgages.³⁷ The mortgage pass-through certificates guarantied by Ginnie Mae are exempt from registration as securities under the 1933 Act.³⁸ The regulatory standards imposed by Ginnie Mae, and the fact that its guaranties bear the full faith and credit of the federal government,³⁹ make Ginnie Mae certificates the “gold standard” for mortgage-backed securities.⁴⁰

Congress expanded the secondary mortgage market in 1970 with the Federal Home Loan Mortgage Corporation Act,⁴¹ which chartered the Federal Home Loan Mortgage Corporation (Freddie Mac), another government sponsored enterprise (GSE) whose stock was sold to investors in the public securities markets, and authorized it to buy and package mortgages on residential properties ranging from single-family houses to four-family dwellings.⁴² Freddie Mac mortgage-backed securities, like those issued by Fannie Mae, have no direct federal guaranties, although recent events have demonstrated that the federal government, as long suspected, would act to assure payment of GSE securities as a last resort.⁴³ Like Fannie Mae, Freddie Mac and their securities also enjoyed

35. 12 U.S.C. § 1719; *see also* PAVEL, *supra* note 32, at 59.

36. *See* PAVEL, *supra* note 32, at 3–4, 68.

37. 12 U.S.C. § 1721.

38. 15 U.S.C. § 77d(5)(A)(c)(ii) (2006).

39. *See* Letter from William H. Rehnquist to George Romney (Dec. 9, 1969), in U.S. DEP'T OF HOUS. & URBAN DEV., GOVERNMENT NATIONAL MORTGAGE ASSOCIATION MORTGAGE-BACKED (5500.3) app. XII-5 (2006).

40. Asset-backed securities guarantied by Ginnie Mae are also exempt from registration with the SEC under the 1933 Act. *See* 15 U.S.C. § 77d(5)(A)(c)(ii). The SEC agreed that GNMA-guarantied securities were exempt from registration even before express exemption was included by amendment to the 1933 Act. Letter from Courtney Whitney, Jr. to Woodward Kingman (Oct. 22, 1969), in U.S. DEP'T OF HOUS. & URBAN DEV., *supra* note 39, at app. XII-4.

41. Pub. L. No. 91-351, 84 Stat. 451 (1970) (codified as amended at 12 U.S.C. §§ 1451–1459).

42. Federal Housing Finance Agency, Government Sponsored Enterprises, <http://www.fhfa.gov/Default.aspx?Page=33> (last visited July 25, 2009).

43. The U.S. Treasury placed Fannie Mae and Freddie Mac, which had arguably become insolvent, into conservatorship on September 7, 2008. The proceeding resembles a regulatory version of a Chapter 11 reorganization, except that the government announced it would assume liabilities owed by the two debtor entities. *See* Stephen Labaton & Edmund L. Andrews, *Mortgage Giants Taken Over by U.S.: A Costly Bailout*, N.Y. TIMES, Sept. 8, 2008, at A1.

an initial exemption from the securities laws, but, under pressure from federal regulators and the public based on accounting irregularities, agreed voluntarily to register with the SEC.⁴⁴ Their initial exemption, however, gave them an advantage over private label issuers, as did direct lines of credit from the government, which increased in importance as defaults on mortgages guaranteed by Fannie Mae and Freddie Mac drove them to insolvency, forcing them into conservatorship in 2008.⁴⁵

Wall Street took the next step with “private label” securities, generally known as collateralized mortgage obligations (CMOs).⁴⁶ Originally, private label CMOs closely resembled the mortgage-backed securities issued or insured by GSEs. An investment bank⁴⁷ would buy a pool of mortgages from an originator, organize what the SEC terms a “Special Purpose Vehicle” (SPV)⁴⁸—usually a subsidiary corporation or trust—and sell the pool to the SPV. The SPV would then issue securities representing fractional interests in the pool, entitled to payments based on cash flow from the underlying mortgages. This process of converting relatively illiquid secured loans into freely tradable securities has become known as “securitization,” and, as increasingly complex financial instruments have evolved from asset-backed securities, as “structured finance.”⁴⁹

The collateral for asset-backed securities quickly expanded beyond traditional mortgages, aided by the SMMEA,⁵⁰ which included mortgages on manufactured homes in the general category of “mortgage related security.”⁵¹ Soon, asset-backed securities were issued based on income streams from a broad range of obligations, including secured and unsecured debt ranging from car loans to credit card receivables to commercial loans, as well as nondebt obligations such as leases and franchise fees.⁵² Unlike mortgage-backed securities issued by GSEs (until Fannie

44. Both GSEs agreed to register with the SEC in 2003, and Fannie Mae did so in 2004. Freddie Mac, however, facing a greater problem in restating its earnings, did not register until 2008. See SEC, *Freddie Mac Now SEC Reporting Company*, News Release 2008-145 (July 18, 2008); Vikas Bajaj, *Freddie Mac Outlines Stock Sale*, N.Y. TIMES, July 19, 2008, at C4; Dawn Kopecki, *More Disclosure Asked of Fannie Mae, Freddie Mac*, WALL ST. J., Feb. 3, 2003, at B6; Opinion, *Fan and Fred Get the Business*, WALL ST. J., Feb. 19, 2003, at A14.

45. See *supra* note 43.

46. See PAVEL, *supra* note 32, at 8–9.

47. The SEC refers to the assembler of a mortgage pool as an “arranger.” See Proposed Rules for Nationally Recognized Statistical Rating Organizations, Exchange Act Release No. 34-57967, 73 Fed. Reg. 36,212, 36,215 n.25 (proposed June 16, 2008) [hereinafter *Proposed Rules*]. Perhaps it might be more appropriate to refer to such a party as a “Loan Arranger” in view of the Wild West climate of the housing bubble.

48. See Securities Industry Assoc., SEC No-Action Letter, <http://www.sec.gov/divisions/marketreg/mr-noaction/sia071301-out.pdf>, at 1 n.3 (July 13, 2001).

49. See generally *The Role of Credit Rating Agencies in the Structured Finance Market: Hearing Before the Subcomm. on Capital Mkts., Ins. & Gov't Sponsored Enters. of the H. Comm. on Fin. Servs.*, 110th Cong. (2007) [hereinafter *Rating Agencies Hearing*].

50. Pub. L. No. 98-440, 98 Stat. 1689 (codified in scattered sections of 15 U.S.C. § 78 (2006)).

51. 15 U.S.C. § 78c(a)(41)(A)(i).

52. See, e.g., PAVEL, *supra* note 32, at 141–60.

Mae and Freddie Mac relaxed their standards around 2005 because of competitive pressure from private label instruments),⁵³ however, these asset-backed securities did not have to comply with any fixed standards for quality of their underlying debt instruments. They lacked government guaranties and were subject to registration under the federal securities laws. Absent government backing, their marketability, as we shall see, became dependent upon their being placed in a high rating category by one or more rating agencies.⁵⁴

The market for asset-backed securities rapidly widened as more GSEs were created and were complemented by private label securitization. Congress chartered the Student Loan Marketing Association (Sallie Mae) in 1972 as a GSE intended to aid students in obtaining educational loans, which it packaged into pools used to collateralize asset-backed securities.⁵⁵ It was privatized over the period 1997–2004, becoming a publicly held for-profit corporation.⁵⁶ Other GSEs were also created during the 1980s, using new collateral such as farm loans to create asset-backed securities.⁵⁷

From the late 1980s, asset-backed securities assumed importance as components of the capital of financial institutions such as securities broker-dealers.⁵⁸ They entered the international financial markets, becoming embedded in the capital of both commercial and investment banks. Not only were securities based on American assets sold on global markets, but securitization techniques were used to provide liquidity for similar assets in other countries.⁵⁹ Because of this, when the CDO crisis began, the defaults of U.S. mortgagors threatened financial institutions around the world.

B. *Legal Issues Concerning Asset-Backed Securities*

Lawyers who worked on private label asset-backed securities in the early days of securitization dealt with several issues concerning the new instruments. Some of these, stemming from securities law, were quickly overcome with the SEC's cooperation. Others, based on debtor-creditor law, continue to be the source of many high-priced hours of legal opinion work, complemented by continuing criticism from academic lawyers.

53. See Charles Duhigg, *Pressured to Take More Risk, Fannie Reached Tipping Point*, N.Y. TIMES, Oct. 5, 2008, at A1.

54. See *infra* text accompanying note 55.

55. Educational Amendments of 1972, Pub. L. No. 92-318, 86 Stat. 235 (codified as amended at 20 U.S.C. § 1087-2 (2006)).

56. See Sallie Mae, About Us, <http://www.salliemae.com/about> (last visited July 25, 2009).

57. These were issued by the Federal Agricultural Mortgage Corporation (Farmer Mac), which was chartered by the federal government in 1988, but like Freddie Mac and Sallie Mae, operates as a publicly held corporation whose stock is traded on public markets. Its purpose is to securitize farm mortgages and operating loans.

58. See, e.g., SALOMON SMITH BARNEY GUIDE TO MORTGAGE-BACKED AND ASSET-BACKED SECURITIES 115 (Lakhbir Hayre ed., 2002).

59. See generally SCHWARCZ, *supra* note 30, § 8.

None of these issues, however, played a part in the meltdown of the CDO market that began with defaults on securitized subprime mortgages in 2006.

The first and simplest legal issues turned up in the early days of structured finance. Because SPVs that issued CDOs did not themselves do business but derived their cash flows from investments in income-producing assets, lawyers were concerned that they could be required to register as investment companies under the Investment Company Act of 1940,⁶⁰ which would have subjected them to a level of regulatory compliance that would have made them uncompetitive with other debt securities.⁶¹ The SEC first agreed that asset-backed securities that complied with section 3(c)(5) of the 1940 Act⁶² would not be treated as investment companies, and settled the question by adopting Rule 3a-7 in 1992, which precluded SPVs meeting certain criteria from being considered investment companies for purposes of the 1940 Act.⁶³

Additionally, there were early problems with state securities (blue sky) laws. Federal law preempted these laws for securities issued by federal GSEs, but this was not true for private label asset-backed securities. Moreover, private label securities, regardless of rating, were not legal investments for state-regulated entities such as insurance companies in many states. The SMMEA dealt with these concerns in 1984, preempting state law to permit legal sale of asset-backed securities and authorizing their use by state-regulated entities unless a state specifically opted out.⁶⁴

More difficult legal issues arose under debtor-creditor law, involving isolation of pools of loans from their sellers. Professor Kenneth C. Kettering has characterized this as the “Bankruptcy Tax”: the risk that mortgages or other collateralized debt sold to SPVs will be clawed back into bankruptcy cases involving their sellers.⁶⁵ Debtor-creditor lawyers, both in practice and in academia, have seen this as the chief legal difficulty posed by securitization,⁶⁶ and yet, as we shall see, it played no significant part in the CDO meltdown that began in 2006.

As noted, the “Bankruptcy Tax” is a cost imposed by the risk that debt instruments sold to an SPV to provide the cash flows for asset-

60. Pub. L. No. 76-768, 54 Stat. 789 (codified as amended at 15 U.S.C. §§ 80a-1 to 80a-64 (2006)).

61. See DIV. OF INV. MGMT., U.S. SEC. & EXCH. COMM’N, PROTECTING INVESTORS: A HALF CENTURY OF INVESTMENT COMPANY REGULATION xx, xxii–xxiii (1992) [hereinafter SEC REPORT].

62. 15 U.S.C. § 80a-3(c)(5).

63. 17 C.F.R. § 270.3a-7 (2008) (stating that notwithstanding section 3(a) of the 1940 Act, an issuer of asset-backed securities will not be treated as an investment company provided that it complies with conditions specified in the regulation).

64. See Secondary Mortgage Market Enhancement Act of 1984, Pub. L. No. 98-440, § 106, 98 Stat. 1689, 1691 (codified at as amended 15 U.S.C. § 77r-1).

65. See Kettering, *supra* note 4, at 1561, 1565–80.

66. See Carlson, *supra* note 19, at 1056–57; Kettering, *supra* note 4, at 1568; see also SCHWARCZ, *supra* note 30, § 3 (indicating that the special-purpose vehicle issuing asset-backed securities must be isolated from the bankruptcy of the originator of the collateral on which such securities are based).

backed securities will be drawn back, notwithstanding sale transactions, into a bankruptcy case concerning a direct or indirect seller of the instruments in question. Were this to happen, mortgages or other financial instruments could be pulled from a pool used in a securitization and treated as claims in the originator's bankruptcy. In that case, adverse effects could include the following: (1) The secured creditor could not foreclose without consent of the bankruptcy court; (2) No payments of principal or interest could be made without approval by the bankruptcy court; (3) If the value of the collateral were less than the amount of the claim against it, something frequently seen in the present sharp downturn in the value of homes, the secured creditor would be entitled only to interest accrued before filing of the bankruptcy petition; and (4) the SPV might be substantively consolidated with the transferor in the latter's bankruptcy, exposing its collateral to the claims of all of the latter's creditors.⁶⁷

The problem is complicated by Article 9 of the Uniform Commercial Code (U.C.C.), which primarily deals with security interests in personal property. U.C.C. section 9-109(a)(3), however, states that Article 9 applies not only to the creation of security interests but also to the sale of accounts,⁶⁸ including any right to payment,⁶⁹ such as the mortgage loans and other accounts receivable that are used to collateralize asset-backed securities. Official Comment 4 to U.C.C. section 9-109 notes that because of the difficulty in distinguishing between the creation of security interests in such collateral and its outright sale, the U.C.C. does not distinguish between the two types of transactions.⁷⁰ The question of whether a particular transfer of debt-based collateral constitutes a sale or a loan is further complicated by features of many asset-backed securities. In many cases, for example, the sellers of mortgages are required to retain part of the risk of default as credit enhancements.⁷¹ On the other hand, the originator may retain the right to payments if collections from the underlying debt exceed the amount contemplated in pricing the sale. Both types of continuing interest on the part of the seller are potential indicators that the seller has not made a clean sale of the mortgages into the pool, but has merely granted a security interest in them.⁷²

Rating agencies require issuers' counsel to provide "true sale" opinions as preconditions for giving ratings in their top two categories.⁷³ As

67. See Kettering, *supra* note 4, at 1566-68.

68. U.C.C. § 9-109(a)(3) (2000).

69. *Id.* § 9-102(a)(2).

70. *Id.* § 9-109 cmt. 4.

71. See *infra* note 135 and accompanying text.

72. See, e.g., SCHWARCZ, *supra* note 30, § 4:1.

73. It is important to note that the impetus to provide "true sale" opinions came from the rating agencies. This was certainly true in the author's experience, where individual paragraphs of such opinions were heavily negotiated with the rating agencies. See also Neil D. Baron, *The Role of Rating Agencies in the Securitization Process*, in A PRIMER ON SECURITIZATION 81, 87-88 (Leon T. Kendall

we will see, such ratings are essential for marketability of most such securities and are important for others.⁷⁴ True sale opinions analyze the economic and legal characteristics of the transfer of mortgages or other financial instruments to SPVs, and state that the transfers are in fact sales of the collateral rather than security interests in it.⁷⁵ The agencies believe that if a transfer is a true sale, the assets sold may not be clawed back into a bankruptcy case involving the transferor. These opinions are difficult to give even if the seller retains no interest in the instruments transferred to the pool, and more difficult if there is such retained interest. There is little case law on the subject, and what there is tends to be adverse to finding that the techniques are successful in making SPVs “remote” from the bankruptcies of the entities selling assets to them.⁷⁶ The result is that true sale opinions, at best, are highly qualified and give little real comfort to their recipients.⁷⁷

Additionally, rating agencies seek to assure “bankruptcy remoteness” by asking issuers’ counsel for “non-consolidation” opinions—i.e., opinions that, should the seller of accounts or similar property to an SPV file for bankruptcy, a bankruptcy court would not substantively consolidate the assets of the SPV with those of the seller, thereby subjecting them to bankruptcy court jurisdiction.⁷⁸ Though substantive consolidation is a common law rather than statutory device,⁷⁹ the opinion is easier to give. Substantive consolidation is an equitable remedy that is used only “sparingly.”⁸⁰ So long as the control persons of the SPV respect its separation from that of the originator of the securitized accounts—particularly by not commingling funds—chances that a court will substantively consolidate the two are small.⁸¹

It is not just academics who believe this question is important. The initial impetus to make SPVs “bankruptcy remote” came from the rating agencies.⁸² The President’s Working Group on Financial Markets, estab-

& Michael J. Fishman eds., 1996). Mr. Baron was Vice Chairman and General Counsel of Fitch at the time he wrote the cited essay in 1996.

74. See *infra* Part I.C.

75. See Baron, *supra* note 73, at 87–88; Michael Gaddis, Note, *When Is a Dog Really a Duck?: The True-Sale Problem in Securities Law*, 87 TEX. L. REV. 487, 490–92 (2008).

76. See *In re LTV Steel Co.*, 274 B.R. 278, 285–86 (Bankr. N.D. Ohio 2001) (indicating that the purported transfer of accounts receivable by debtor corporation to SPV for purpose of securitization did not remove those accounts from the debtor’s bankruptcy estate); Kettering, *supra* note 4, at 1582.

77. See, e.g., John C. Coffee, Jr., Comment, *Can Lawyers Wear Blinders? Gatekeepers and Third-Party Opinions*, 84 TEX. L. REV. 59, 65–66 (2005); Kettering, *supra* note 4, at 1628.

78. See Richard E. Mendales, *Looking Under the Rock: Disclosure of Bankruptcy Issues Under the Securities Laws*, 57 OHIO ST. L.J. 731, 774–75, 780–81 (1996).

79. See *Sampson v. Imperial Paper & Color Corp.*, 313 U.S. 215, 218–21 (1941) (creating doctrine of substantive consolidation); *In re Owens Corning*, 419 F.3d 195, 205 (3d Cir. 2005); *In re Augie/Restivo Baking Co., Ltd.*, 860 F.2d 515, 518 (2d Cir. 1988).

80. *In re Genesis Health Ventures, Inc.*, 402 F.3d 416, 423 (3d Cir. 2005).

81. See *Owens Corning*, 419 F.3d at 210–16.

82. See Kenneth M. Ayotte & Stav Gaon, *Asset-Backed Securities: Costs and Benefits of “Bankruptcy Remoteness”* 3 (Social Science Research Network, Texas Finance Festival, 2005), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=813847. The author of this Article negotiated with

lished in 1988 following the stock market crash of 1987,⁸³ believed that the question was so important that they developed proposals on the subject which Rep. James A. Leach introduced to the House of Representatives.⁸⁴ These proposals would have excluded financial instruments sold to a third party to collateralize asset-backed securities from the bankruptcy estate of the seller.⁸⁵ They were never enacted, however⁸⁶—not even with the draconian changes to the Bankruptcy Code enacted in 2005.

Despite the attention given to the “Bankruptcy Tax” as a problem with securitization, it lacks the importance attributed to it both by advocates⁸⁷ and critics for two key reasons. First, contrary to assertions made by critics of securitization,⁸⁸ its *raison d’être* is not to obtain a higher rating for debt issued by an SPV created by a debtor corporation than it could have obtained by issuing conventional bonds secured by such collateral,⁸⁹ although that may true for the limited subclass of asset-backed securities based on commercial loans.⁹⁰ As noted above, securitization was invented to create a secondary market for mortgages, and asset-backed securities based on residential mortgages, rather than corporate debt, still underlie the largest part of the CDO market. For mortgage-backed securities, rating in one of the highest two categories of at least one rating agency is required for access to a crucial market segment—use as legally required capital by governmental or regulated entities.⁹¹

More important, the crisis that began in 2006 had nothing to do with bankruptcies of CDO originators, but was based on defaults on subprime mortgages underlying CDOs exceeding the expectations on which CDO

rating agency representatives on the terms of many such opinions while acting as issuer’s counsel during the early days of private label securitization in the mid-1980s.

83. See Exec. Order No. 12,631, 53 Fed. Reg. 9421 (Mar. 18, 1988).

84. See *Bankruptcy Reform Act of 1999: Hearing on H.R. 833 Before the Subcomm. on Commercial & Admin. Law of the H. Comm. on the Judiciary*, 106th Cong. (1999) (statement of Rep. James A. Leach, Chairman, H. Banking and Financial Services Committee), available at <http://financialservices.house.gov/banking/31899pr.htm>.

85. Bankruptcy Reform Act of 1999, H.R. 833, 106th Cong. (1999).

86. H.R. 833, which included restrictions on the clawback of financial instruments sold by a debtor in a bankruptcy case, was an earlier version of what became the 2005 Amendments to the Bankruptcy Code. Because of the bill’s severe restrictions on consumer bankruptcy relief, the Clinton administration strongly opposed it, and the President “pocket-vetoed” the version of the bill that did pass. See Melissa B. Jacoby, *Negotiating Bankruptcy Legislation Through the News Media*, 41 HOUS. L. REV. 1091, 1102–03 (2004); Office of Management and Budget, H.R. 833—Bankruptcy Reform Act of 1999, <http://www.whitehouse.gov/omb/legislative/sap/106-1/HR833-h.html> (last visited July 25, 2009).

87. See generally SCHWARCZ, *supra* note 30.

88. See, e.g., Kettering, *supra* note 4, at 1563, 1568.

89. This may vary, however, according to the nature of the income-producing collateral. Though it is not the basic purpose for securitization of mortgages, it may be more true of asset-backed securities issued employing other types of collateral such as commercial loans. Mortgages, however, were by far the most important source of defaults leading to the CDO meltdown. See, e.g., *Subsiding: How Bond Investors Are Exposed to Bad Home Loans in the Subprime Market*, ECONOMIST, Mar. 3, 2007, at 78.

90. See SCHWARCZ, *supra* note 30, § 1:2.

91. See *infra* text accompanying notes 105–10.

ratings were based.⁹² The origins of the crisis lie elsewhere, both in irresponsible lending practices that emerged during the housing bubble and in the use of the rating system as a surrogate for due diligence in evaluating asset-backed securities and their derivatives.

C. *The Rating Game*

As the issuance of asset-backed securities ballooned during the period beginning roughly in 1984,⁹³ they were increasingly used for purposes other than direct investments. Ginnie Mae certificates were accepted as near-substitutes for U.S. Treasury securities by purchasers requiring the safest securities available.⁹⁴ For private label asset-backed securities, however, the ability to pay interest and principal in full became a key issue in their sale. It was here that the rating rabbit jumped into the hat.

Rating agencies have rated the creditworthiness of businesses, and the ability of debt securities issued by sovereign entities, corporations, and special-purpose entities to repay principal and interest, for a century.⁹⁵ The three most important agencies for purposes of the CDO market are Moody's, Standard & Poor's (S & P), and Fitch.⁹⁶ Originally, they rated corporations, or their ability to repay particular debt securities, and earned their revenues from investor subscriptions.⁹⁷ In the 1970s, however, they changed their business model to base their revenues on fees from the issuers of securities that they rated.⁹⁸ This created a conflict of interest, because it gave the agencies a powerful incentive to give their customers favorable ratings.

The change in business model coincided with another change that made the agencies more important actors in the issuance of asset-backed securities: government bodies, ironically led by the SEC, began to use the agencies' ratings to measure the quality of the securities held by regu-

92. See Lowenstein, *supra* note 2, at 38–39.

93. This date is approximate, based on the author's own experience at Skadden, Arps, Slate, Meagher & Flom LLP in New York.

94. See Letter from William H. Rehnquist to George Romney, *supra* note 39. The reason why Ginnie Mae certificates are not completely equivalent to Treasury securities, despite being backed by the full faith and credit of the United States, is that they are subject to prepayment risk—the near certainty that mortgages providing their cash flow will be prepaid in increasing numbers as they age.

95. See Moody's Investors Service, Moody's History, <http://www.moodys.com/moodys/cust/AboutMoody/AboutMoody.aspx?topic=history> (last visited July 25, 2009); Moody's Investors Service, Moody's Role in the Global Capital Markets, <http://www.moodys.com/moodys/cust/AboutMoody/AboutMoody.aspx?topic=intro> (last visited July 25, 2009).

96. As of 2002, Moody's and S & P together had almost 80 percent of the global market share for rating securities; Fitch had 14 percent, and the remainder was scattered among smaller newcomers. See *Challenging Times for Credit Ratings Monopoly*, IRISH TIMES, Dec. 13, 2002, at 57, available at <http://www.irishtimes.com/newspaper/finance/2002/1213/1039700348175.html>; see also Kettering, *supra* note 4, at 1696.

97. Claire A. Hill, *Regulating the Rating Agencies*, 82 WASH. U. L.Q. 43, 49–50 (2004).

98. See *id.* at 50; Kettering, *supra* note 4, at 1679–80; Frank Partnoy, *The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies*, 77 WASH. U. L.Q. 619, 652–53 (1999).

lated entities. There was precedent for this, since the Federal Reserve Banks used ratings of conventional corporate debt in evaluating the capital held by regulated banks as early as the 1930s.⁹⁹ The latter, however, significantly differed from the later use of ratings for asset-backed collateral. SEC registration of conventional debt securities and periodic reporting by their issuers, as required by the securities laws,¹⁰⁰ provided a straightforward check on ratings for conventional debt. Credit ratings, though providing a useful summary of this information for investors, were not essential to the issue of conventional debt securities.¹⁰¹ In fact, the rating agencies went from a position of financial power to privation after the securities laws went into force.¹⁰²

The greater complexity of asset-backed securities, and the fact that the SEC struggled for a long time concerning the required disclosure until it finally summed up a long series of rulings with the inadequate Regulation AB in 2005,¹⁰³ made the market for asset-backed securities and their derivatives more dependent on the rating system than the market for conventional corporate debt. It is ironic that the SEC helped initiate this dependence on ratings, without bringing the rating agencies fully within its system of structured disclosure.¹⁰⁴

The process began in 1975, when the SEC approved use of ratings by what it called Nationally Recognized Statistical Rating Organizations (NRSROs) as a basis for judging the quality of securities that broker-dealers could use to satisfy their capital requirements.¹⁰⁵ Since then, the SEC expanded its use of ratings to other areas, such as regulations under the 1940 Act,¹⁰⁶ under which taxable money market funds may not hold more than 5 percent of their assets in securities rated below the top tier ratings of at least two rating agencies.¹⁰⁷ Statutes used the NRSRO concept to further increase the importance of the rating system. Under the SMMEA, for example, “mortgage related securities” ranked in one of the two highest rating categories by at least one NRSRO,¹⁰⁸ are acceptable investments for federal savings and loan associations and credit un-

99. See Partnoy, *supra* note 98, at 687.

100. Securities Act of 1933 § 2, 15 U.S.C. § 77b(a)(1) (2006); Securities Exchange Act of 1934 § 3(a)(10), 15 U.S.C. § 78c(a)(10).

101. Their failings, in fact, paralleled the failings of the disclosure system established by securities law, as in their failure to issue timely downgrades of conventional debt for issuers such as Enron, which had concealed major adverse information from disclosures required under the 1934 Act.

102. Cf. Partnoy, *supra* note 98, at 622–25.

103. See *infra* text accompanying notes 174–75.

104. See Coffee, *supra* note 77, at 64 (stating that rating agencies face little competition, less liability, and therefore need to engage in little due diligence).

105. See Exchange Act Rule, 17 C.F.R. § 240.15c3-1 (2008); Definition of Nationally Recognized Statistical Rating Organization, Exchange Act Release No. 33-8570, 70 Fed. Reg. 21,306, 21,307 (Apr. 25, 2005).

106. 15 U.S.C. § 80a-1 (2006).

107. See 17 C.F.R. § 270.2a-7(a)(10)(i), (a)(12), (a)(17), (c)(3) (2008); Baron, *supra* note 73, at 83.

108. 15 U.S.C. § 78c(a)(41).

ions.¹⁰⁹ The SMMEA also made mortgage-backed securities in the top two rating categories acceptable as part of the capital of state-regulated entities such as insurance companies, unless the state in question opted out.¹¹⁰

Other federal and state regulators, in establishing standards for moneyed institutions such as banks and insurance companies,¹¹¹ followed in requiring that securities be top-rated by one or more nationally recognized rating agencies to be counted at face value toward minimum capital requirements.¹¹² The result of this was to make asset-backed securities rated in the top two rating categories nearly equivalent to those issued or guaranteed by GSEs, despite their lack of an express or implied federal guaranty. Top-tier ratings are therefore indispensable in the design of asset-backed securities, and issuers' lawyers¹¹³ spend considerable time negotiating with rating agencies in order to achieve such ratings for at least one tranche of each issue.¹¹⁴

This dependence on the rating system created serious problems. First, the rating agencies, though an integral part of the process of issuing asset-backed securities, were largely unregulated until 2006, except by a series of SEC no-action letters that did not focus on the substance of ratings being issued.¹¹⁵ CRARA expressly superseded them, replacing the earlier informal rulings with a scheme that subjected the rating agencies to minimal regulation.¹¹⁶ Moreover, until CRARA, Moody's and S & P enjoyed a near-duopoly because of the SEC's failure to accredit competing rating agencies. The absence of effective competition left little incentive to insure that ratings were accurate, or even updated to deal with changing conditions.¹¹⁷ Moody's, for example, changed its statistical model in 2002 and did not change it again until 2007—after the meltdown had begun—when it conceded that the mortgage market had changed substantially.¹¹⁸

109. 12 U.S.C. §§ 1464(c)(1)(R), 1757(15)(B) (2006).

110. 15 U.S.C. § 77r-1.

111. For example, the FDIC, in regulation for valuing insured bank and thrift capital, adopts the SEC definition of "NRSRO" and uses ratings in establishing weighting of asset-backed securities toward capital requirements of insured institutions. 12 C.F.R. § 325 App. A, II.B.5.a., d.(1) n.14 (2008).

112. See Baron, *supra* note 73, at 83.

113. Of whom the author was one.

114. See Coffee, *supra* note 77, at 63 (stating that without ratings, asset-backed securities are "unmarketable").

115. *Credit Rating Agencies and the Financial Crisis: Hearing Before the H. Comm. on Oversight & Gov't Reform*, 110th Cong. 4 (2008) (statement of Rep. Henry A. Waxman, Chairman, H. Comm. on Oversight and Gov't Reform).

116. See *supra* text accompanying note 14.

117. See *Legislative Solutions for the Rating Agency Duopoly: Hearing on H.R. 2990 Before the Subcomm. on Capital Mkts. Ins. & Gov't Sponsored Enters. of the H. Comm. on Fin. Servs.*, 109th Cong. 72–82 (2005) [hereinafter *Legislative Solutions Hearing*] (statement of James A. Kaitz, President and CEO, The Association for Financial Professionals), <http://financialservices.house.gov/media/pdf/109-42.pdf>; *id.* at 83–91 (statement of Frank Partnoy, Professor of Law, University of San Diego School of Law); *id.* at 102–10 (statement of Nancy Stroker, Group Managing Director, Fitch Ratings).

118. See Lowenstein, *supra* note 2, at 41.

As the complexity of asset-backed securities and their derivatives increased, transparency declined, and the market became even more dependent on the rating system, without concern for its accuracy.¹¹⁹ For a synthetic CDO based on derivative obligations resting on a pool of AAA-rated asset-backed securities, a purchaser was not in a good position to backtrack to determine whether the AAA ratings reflected consistent up-to-date statistical models applied correctly to underlying pools of well-documented obligations with known characteristics.¹²⁰

D. *Financial Evolution and Decreased Transparency*

Direct securitization was only a beginning. The first step away from simple securitization was to divide securities based on principal and income flow from a pool of mortgages or other rights to payment into “tranches,” entitling buyers to receive payments at different time intervals or in different orders of priority.¹²¹ A tranche entitled to receive early distributions of principal and interest from underlying collateral is considered more secure than a tranche entitled to receive later distributions.¹²² Similarly, a tranche with a first-priority claim on cash flows from collateral is entitled to collect in full before a second-priority tranche may receive anything, and so forth.¹²³ Cash flows from a pool may be sliced in still more exotic ways, creating securities such as “strips,” which entitle holders to receive returns based solely on interest or principal payments from a pool.¹²⁴ The special sensitivity of these securities to factors such as changes in prevailing interest rates has made them popular with sophisticated investors for hedging against such changes.¹²⁵

Because junior tranches’ rights to payment from underlying obligations are subordinate to those of senior tranches, the senior tranches are backed by more collateral than the junior tranches and are therefore considered more likely to pay their investors in full. This has been called the “waterfall” effect, where the flow of funds due all tranches satisfies the claims of the senior tranches before any may be paid to holders of ju-

119. See *supra* text accompanying note 93.

120. See Lowenstein, *supra* note 2, at 36.

121. The FDIC, whose regulations also rely on the rating system in setting capital requirements for insured institutions, refers to this as the creation of “stratified credit risk positions.” See 12 C.F.R. § 325 App. A, II.B.5.a.(6), (12) (16), (18), (19) (adopting in subsection (12) the SEC system of accrediting NRSROs).

122. This is due to three principal factors. First, the default rate on mortgages in any pool increases over time. Secondly, if prevailing interest rates rise, the value of mortgage-backed securities based on lower interest rates will drop, just as with conventional bonds. Third, even for mortgages whose obligors make timely payments, many are prepaid as houses are sold, thereby terminating the cash flows used to pay holders of later-paying tranches. See PAVEL, *supra* note 32, at 68–75.

123. See Leon T. Kendall, *Securitization: A New Era in American Finance*, in A PRIMER ON SECURITIZATION, *supra* note 73, at 1, 9–11.

124. *Id.* at 11.

125. *Id.*

nior tranche securities.¹²⁶ They are therefore rated higher than tranches entitled to collect later in the lifetime of collateral and/or at lower levels of priority. The rating agencies assign ratings to each tranche using statistical models based, *inter alia*, on the expected default rate of mortgages with particular characteristics in each pool, such as obligors' credit scores and the loan-to-value ratio (reflecting owner's equity in mortgaged property) of each loan.¹²⁷ Supposedly, these models were tested under "stress" conditions drawn from "worst case" economic scenarios such as the Great Depression.¹²⁸

The rating agencies do not perform due diligence to ensure adequate documentation for each mortgage in a pool, nor to see whether mortgages represent merely higher risks than would be permitted under Ginnie Mae standards, or have qualitatively different characteristics making default almost certain, such as mortgages with built-in resets to drastically higher interest rates.¹²⁹ Moreover, Moody's and S & P have enjoyed a near-duopoly in rating asset-backed securities and their derivatives, so they lacked competitive pressure to update their statistical models to reflect changing conditions such as the climate of easy credit prevailing after 2002.

A single offering may include tranches rated AAA (S & P's top investment-grade rating), tranches with lower but still investment-grade ratings, and tranches rated below investment grade.¹³⁰ Because top-rated tranches enjoy the right to collections from all obligations in a pool before lower-rated tranches may receive anything, they may receive ratings indicating stronger payment ability than most—or even all—of the individual sources of cash flow in a pool. A mortgage-backed security may thus receive a top rating even though all the mortgages backing it are "subprime."¹³¹ Rating agency rules for first-level asset-backed securities do not normally require what might be called a floor—a minimum percentage of high-grade loans in a pool. Significantly, they usually *do* require a floor for CDOs based on pools of asset-backed securities: a min-

126. See Baron, *supra* note 73, at 85–86; Steven L. Schwarcz, Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown 6 (Feb. 19, 2008) (unpublished manuscript, available at http://works.bepress.com/steven_schwarcz/7).

127. See, e.g., Baron, *supra* note 73, at 84–85.

128. See *id.* at 85–86.

129. Ginnie Mae rules preclude it from guaranteeing pools of loans including characteristics such as significantly higher interest rates than those currently being paid on Ginnie Mae securities, or with refinancing built into the structure of the loans. See U.S. DEP'T OF HOUS. & URBAN DEV., *supra* note 39, 19-2(G).

130. An "investment grade" rating is normally understood to be one in the top four categories of ratings issued by a particular agency. In the S & P system, for example, the four top rating groups (including pluses and minuses) are AAA, AA, A, and BBB. The SEC has made use of this concept of "investment grade" by making only securities in these categories eligible to qualify for matters such as capital requirements. See, e.g., 17 C.F.R. § 240.3a1-1(b)(3)(v)(C) (2008) (stating broker's capital requirement in terms of securities in four highest rating classifications); Hill, *supra* note 97, at 44; Parton, *supra* note 66, at 649–50 n.139 (showing classification systems used by rating agencies).

131. See Lowenstein, *supra* note 2, at 38–39; Schwarcz, *supra* note 126, at 6.

imum percentage of securities in each pool must carry a top rating for the CDO to receive such a rating.¹³²

Rating agencies accept other techniques, generally known as “credit enhancement,” for making a triple-A silk purse from a sow’s ear consisting of subprime mortgages.¹³³ These include overcollateralization—the use of pools of mortgages whose total projected payouts exceed those of the securities issued;¹³⁴ the retention by originators of at least part of the risk of pools of mortgages they sell to SPVs;¹³⁵ third-party guaranties (including bank standby letters of credit);¹³⁶ and the purchase of default insurance from monoline insurance companies—a private version of FHA and Ginnie Mae insurance.¹³⁷

Each of these approaches has problems. Overcollateralization was the first “credit enhancement” used.¹³⁸ In the 1980s, when mortgage-backed securities began to take off, only banks and thrift institutions originated mortgages, the supply of mortgages for sale did not meet the demand for them by securitization using a pure overcollateralization model.¹³⁹ The “waterfall” model of collateralized mortgage obligations was developed to supply this need, substituting the subordination of junior claims on the underlying mortgages for an excess of mortgages included in each pool.¹⁴⁰ The second problem, which became apparent in the present crisis, was the same with pure overcollateralization and the “waterfall” model: neither senior claims against a pool, nor an excess of assets in the pool, will assure payment to holders of senior claims if the cash flows making up the supposed excess are illusory.¹⁴¹

The retention of risk by originators had different problems. One was that it made it more difficult for attorneys to give already weak “true sale” opinions, as the retention of risk indicated less than a complete sale of the mortgages transferred to an SPV.¹⁴² The other problem, of more practical importance, was that retention of risk cannot raise the rating of a mortgage pool higher than that of the originator, and large-scale risk retention will downgrade an originator’s creditworthiness.¹⁴³

132. See *Proposed Rules*, *supra* note 47, at 36,215–16.

133. See SCHWARCZ, *supra* note 30, § 2:3.

134. See *Proposed Rules*, *supra* note 47, at 36,214.

135. This is known as “recourse,” since it gives holders of asset-backed securities recourse to the originators for at least part of the losses suffered when underlying obligors default. See PAVEL, *supra* note 32, at 29.

136. Even GSEs such as Freddie Mac use these to support asset-backed securities not supported by FHA insurance. See Freddie Mac, Freddie Mac Form Letter of Credit, <http://www.freddiemac.com/multifamily/docs/letters-credit.doc> (last visited July 25, 2009).

137. See SCHWARCZ, *supra* note 30, § 2:3; see also *Proposed Rules*, *supra* note 47, at 36,214.

138. See Lewis S. Ranieri, *The Origins of Securitization, Sources of Its Growth and Its Future Potential*, in A PRIMER ON SECURITIZATION, *supra* note 73, at 31, 32.

139. See *id.*

140. *Id.* at 35–37.

141. See Schwarcz, *supra* note 126, at 6–7.

142. See, e.g., *id.* at 16; see also *supra* notes 71–77 and accompanying text.

143. Cf. Baron, *supra* note 73, at 87.

Standby letters of credit issued by banks also presented problems. The obligation represented by a standby letter of credit on a large CDO issue creates a contingent obligation on the part of the issuing bank that might exceed limits imposed by bank regulators.¹⁴⁴ Moreover, a CDO's rating will not usually exceed the credit rating of the bank, and comparatively few banks, particularly since the savings and loan debacle of the 1980s, enjoyed top ratings.¹⁴⁵ There are, needless to say, even fewer now.

The use of monoline insurers also failed to produce "bulletproof" securities. "Monoline" insurers are so called because their business consists entirely of insuring financial instruments (including standard debt instruments such as municipal and corporate bonds) against default, without alternate lines of business such as life insurance to strengthen them financially. They thus lack the diversification of risk that protects other insurers. In fact, the CDO crisis has led Ambac Financial Group, Inc. to lose its own AAA rating.¹⁴⁶ Because instruments depending on insurance carry ratings no higher than that of their insurer, this loss could force it out of a business in which CDOs need to carry AAA ratings.¹⁴⁷

The division of cash flows into tranches and use of dodgy credit enhancements were further steps toward catastrophic failure of the system, because "depositors" (i.e., the investment banks dropping collateral into security-issuing pools)¹⁴⁸ began to use progressively higher-risk loans as collateral on the premise that holders of a first tranche were protected by their higher priority in receiving cash flows or other enhancements. As this change in risk characteristics occurred, the data on which the rating agencies' models were based became less relevant, and the models less reliable.¹⁴⁹ Moreover, a vicious circle developed, in which mortgage lenders and brokers, believing that they were transferring all risk to the SPVs to which they sold mortgages, began lending to less qualified mortgagors and on property with inflated or otherwise questionable resale value.¹⁵⁰ This accelerated the expansion of the housing bubble and decreased the quality of loans being packaged into mortgage-backed securities.¹⁵¹

The "waterfall" model failed because the rating agencies, doing no due diligence on the pools they were rating, failed to recognize major

144. Bank Holding Companies and Change in Bank Control, 12 C.F.R. § 225 app. A (2008) (setting forth "Capital Adequacy Guidelines for Bank Holding Companies").

145. See Baron, *supra* note 73, at 87.

146. See Christine Richard, *Ambac's Insurance Unit Cut to AA from AAA by Fitch Ratings*, BLOOMBERG, Jan. 19, 2008, <http://www.bloomberg.com/apps/news?pid=20601087&sid=asLrTQyLRQqs>.

147. See *id.*

148. See 17 C.F.R. § 230.190(a)(4) (2008).

149. See *American Mortgages: Bleak Houses*, ECONOMIST, Feb. 17, 2007, at 75, 76 (new mortgage types were "uncharted territory," whose risks could not be dealt with by standard rating models).

150. *Id.* at 75–76.

151. See *Proposed Rules*, *supra* note 47, at 36,216–17.

qualitative changes in the loans underlying the securities they rated.¹⁵² Moreover, as the SEC found when it studied agency practice pursuant to its mandate under CRARA, the agencies failed to change their statistical models as asset-backed securities became more complex¹⁵³ and failed to adjust their models based on changes in the housing market. Even government agencies such as the FHA, to their later chagrin, began to insure conventional loans whose obligors had progressively less equity in the properties securing their loans.¹⁵⁴ The Department of Housing and Urban Development called for comments at the height of the CDO crisis on a proposal to change its new policy permitting sellers to finance mortgage down payments, which had already been reduced from the one-time norm of 20 percent to a mere 3 percent.¹⁵⁵ It noted that higher default rates had jeopardized the FHA insurance fund's solvency.¹⁵⁶ As a result, the FHA noted that it would need to draw on general government funds for the first time in its seventy-four-year history.¹⁵⁷ Similarly, Fannie Mae and Freddie Mac, driven by a perceived need to compete with Wall Street offerings, purchased higher-risk mortgages than their earlier rules would have permitted, leading to their collapse when the default crisis broke.¹⁵⁸

The rating agencies, apart from conflicts of interest pushing them toward higher ratings, failed to consider this qualitative change in the statistical models on which they based their ratings.¹⁵⁹ Moreover, in the increasing frenzy of the housing bubble, credit analysts at the rating agencies cut more corners as the volume of issues exceeded their capacity to examine offerings presented to them for analysis.¹⁶⁰ While the press has described the problem as concerning "subprime" mortgages issued to mortgagors with less than average ability to make regular payments,¹⁶¹

152. See Lowenstein, *supra* note 2, at 41.

153. See *Turmoil in U.S. Credit Markets: The Role of the Credit Rating Agencies: Hearing Before the S. Comm. on Banking, Hous. & Urban Dev.*, 110th Cong. 3 (2008) (statement of Christopher Cox, Chairman, Securities and Exchange Commission).

154. Tara Siegel Bernard, *Looking for a Mortgage? Check Out the F.H.A.'s Rules*, N.Y. TIMES, Mar. 4, 2009, <http://www.newyorktimes.com/2009/03/04/your-money/mortgages/04fha.html?pagewanted=all>.

155. See Standards for Mortgagor's Investment in Mortgaged Property: Additional Public Comment Period, 73 Fed. Reg. 33,941 (proposed June 10, 2008) (to be codified at 24 C.F.R. pt. 203) [hereinafter *Standards*].

156. See *id.* at 33,942.

157. See Nick Timiraos, *U.S.-Backed Mortgage Program Fuels Risk*, WALL ST. J., June 24, 2008, at A1. Fannie Mae and Freddie Mac have suffered similarly from programs that accepted mortgages on properties in which the mortgagors had no equity. As a result, both are now insolvent. See *supra* note 43.

158. See Duhigg, *supra* note 53.

159. See generally Astrid Van Landschoot & Norbert Jobst, *Rating Migration and Asset Correlation: Structured Versus Corporate Portfolios*, in THE HANDBOOK OF STRUCTURED FINANCE 217 (Arnaud de Servigny & Norbert Jobst eds., 2007).

160. See Michael M. Grynbaum, *Study Finds Flawed Practices at Ratings Firms*, N.Y. TIMES, July 9, 2008, at C1; Lowenstein, *supra* note 2, at 39.

161. See Lowenstein, *supra* note 2, at 39 (reporting that Moody's issued AAA rating for securities based on a pool of exclusively subprime mortgages).

the real situation involved mortgages whose obligors had no chance at all of making payments. This was a situation comparable to the sad history of junk bonds, where the quality of high-yield corporate debt securities fell from junk to garbage.¹⁶² Eventually, the quality of the collateral reached a point that brings to mind the old joke about the retailer who explains that he loses money on each sale, “but we make it up in volume.”

Dividing asset-backed securities into tranches did not end the increase in their complexity. New securities were based on sources of cash flow such as pools of loans secured by personal property, unsecured personal and corporate debt,¹⁶³ and on pools of asset-backed securities. Moreover, investment bankers created “synthetic” instruments not directly based on asset-backed collateral but on third-party guaranties and other derivative obligations based on such collateral.¹⁶⁴ Asset-backed instruments and derivative securities based on them came to be known collectively as “collateralized debt obligations” (CDOs).¹⁶⁵ The many layers between debt instruments providing the underlying cash flow for such instruments and the final instruments sold on world markets destroyed the transparency that the securities laws are designed to create, and made the unregulated rating system a substitute for due diligence in determining their quality.

The rating agencies rate an asset-backed security starting with a “loan tape” describing the characteristics of the included obligations, though they are not required to use due diligence to assure the validity of the information on the tape.¹⁶⁶ They then apply their statistical models to characteristics of each pool of obligations, in order to rate each of the tranches of a particular issue.¹⁶⁷ Unfortunately, unlike ratings for conventional corporate debt securities, an investor cannot easily double-check the balance sheet, income statement, and SEC filings designed to maximize transparency of an offering. Instead, the rating for a tranche of any given CDO is a kind of “black box,” not easily subject to analysis by purchasers. Even investment professionals found that CDOs consisting of multiple types of obligations were impossible to value and had nothing to rely upon but the rating system.¹⁶⁸

162. See *infra* text accompanying note 229–31.

163. See *Halberstein Inv. Ltd. v. Lehman Bros., Inc.*, No. 04-22517, 2006 U.S. Dist. LEXIS 9722, at *2 (S.D. Fla. Jan. 10, 2006) (discussing asset-backed securities backed by conventional corporate bonds).

164. The SEC has defined synthetic securitization as a transaction transferring all or part of the credit risk of underlying instruments to third parties by use of guaranties or other credit derivatives. See 12 C.F.R. § 3 app. B (2008).

165. See *supra* note 2.

166. See Michael Jungman, *The Contributions of the Resolution Trust Corporation to the Securitization Process*, in A PRIMER ON SECURITIZATION, *supra* note 73, at 67, 72.

167. See *Proposed Rules*, *supra* note 47, at 36,214–16.

168. See Louise Story, *A Question of Value: What's an Asset Worth? It's Not Always Easy to Tell*, N.Y. TIMES, June 20, 2008, at C1 (reporting that investment professionals were unable to value CDOs); Tomlinson & Evans, *supra* note 2.

Rating agencies are not currently required to disclose the underlying information to which they apply their statistical models to rate a given asset-backed security or CDO.¹⁶⁹ In fact, Moody's announced early in 2007, well after the subprime default crisis had begun, that it was changing the model that it had adopted, unannounced, in 2002 to rate securities based on subprime mortgages.¹⁷⁰ Therefore, when the rating system failed, beginning with subprime mortgage defaults in 2006, not only private investors but even financial institutions around the world found it impossible to value the CDOs they held, leading to a loss of confidence by banks in lending to each other that threatened to shut down global credit markets.¹⁷¹

E. Pre-Meltdown Attempts at Regulation and Why They Failed

Asset-backed securities, other than those specifically exempted from registration under the securities laws, are subject to the full disclosure requirements for securities issued for sale to the general public.¹⁷² Although it is possible to privately place such securities without the full disclosure required by the securities laws, a key purpose of securitization is turning illiquid assets into readily tradable instruments, and privately placed securities are not freely tradable.¹⁷³ The SEC recognized some of the potential problems with these instruments, but its efforts were too little, too late, and, in its current proposals for more effective regulations, restricted in scope by CRARA.

1. Regulation AB: The Dog That Wouldn't Hunt

The SEC issued a long series of no-action letters dealing with asset-backed securities¹⁷⁴ before it finally combined them into Regulation AB¹⁷⁵ and related rules in 2005. This regulation, which was the only substantial source of securities law dealing with the CDOs issued during the period leading up to the crisis, covered little new ground. The SEC has, however, relied on CRARA to propose new rules in the wake of the crisis. These proposals will be discussed in turn.¹⁷⁶

169. See 15 U.S.C. § 78o-7(a)(1)(B) (2006).

170. See Lowenstein, *supra* note 2, at 41.

171. Another factor in market failure was that most CDOs were traded over the counter (OTC) rather than on regulated stock exchanges. For liquidity, the OTC market relies on the willingness of dealers to buy securities. When the subprime crisis began, the opacity of CDOs made dealers reluctant to buy them, leaving holders such as Bear Stearns with illiquid securities. See Christopher Whalen, *Yield to Commission: Is an OTC Market Model to Blame for Growing Systemic Risk?*, J. STRUCTURED FIN., Summer 2008, at 8, 9.

172. See generally Regulation S-K, 17 C.F.R. § 229 (2008).

173. See SCHWARCZ, *supra* note 30, § 6.2. SEC Rules 144 and 144A prohibit the transfer of unregistered securities except to qualified investors.

174. See, e.g., Sec. Indus. Ass'n, SEC No-Action Letter, 2001 WL 849730 (July 13, 2001).

175. 17 C.F.R. §§ 229.1100–.1123.

176. See *infra* Part III.C.

As noted previously, the SEC was involved in the regulation of asset-backed securities and their derivatives from the time that collateralized mortgage obligations took off during the 1980s.¹⁷⁷ It cooperated with private label issuers with no-action letters agreeing that SPVs holding mortgages or other types of debt-based collateral were not subject to regulation as investment companies under the 1940 Act.¹⁷⁸

Regulation AB, however, shows that the SEC's mindset in dealing with asset-backed securities before the CDO meltdown was largely based on its experience in regulating disclosure by operating businesses, rather than the special problems posed by asset-backed securities. This regulation is most effective in dealing with asset-backed securities that most closely resemble traditional corporate debt securities.¹⁷⁹ For asset-backed securities based on pools of large numbers of residential mortgages, however, it would have done better to follow the examples set by the Ginnie Mae regulations.¹⁸⁰

The first problem with the regulation is that it focuses on the type of information used in traditional corporate accounting: the repayment record of the obligations placed in a pool being securitized.¹⁸¹ This is of little use in a pool consisting of newly issued mortgages, particularly when they have different characteristics than earlier mortgages.¹⁸² Even with more "seasoned" mortgages, Regulation AB fails to take into account factors that, in the actual crisis, served to assure default—most frequently, planned automatic "resets" to far higher interest rates at some future time.¹⁸³

Second, the regulation requires no due diligence by issuers or underwriters to assure that assets included in a securitized pool are ade-

177. Freddie Mac issued the first CMO divided into tranches of different maturities in 1983. See Leland C. Brendsel, *Securitization's Role in Housing Finance: The Special Contributions of the Government-Sponsored Enterprises*, in A PRIMER ON SECURITIZATION, *supra* note 73, at 17, 22–23.

178. See *supra* note 63 and accompanying text.

179. See, e.g., 17 C.F.R. § 229.1111(b)(9) (requiring descriptions of the location and use of each mortgaged property, net operating income and net cash flow information, current occupancy rates, the identity of the three largest tenants of the property, etc., for pools including commercial mortgages); 17 C.F.R. § 229.1112 (requiring for each "significant obligor"—under § 229.1101(k) an obligor representing at least 10 percent of pool assets—disclosure of the name of obligor and financial data concerning such obligor required by Regulation S-K, 17 C.F.R. § 229.301).

180. Ginnie Mae, for example, requires its issuers to submit regular audited financial statements and to have in place quality control plans that it accepts concerning the underwriting, origination, and servicing of mortgages sold for secondary marketing. See U.S. DEP'T OF HOUS. & URBAN DEVELOPMENT, *supra* note 39, §§ 2-8, 2-10.

181. See 17 C.F.R. § 229.1100 (requiring the issuer to provide information on the delinquency history for assets in the pool). On a pool composed of newly minted mortgages, this historical information is far less useful than similar information on financial difficulties faced by a corporation issuing conventional securities.

182. See *American Mortgages: Bleak Houses*, *supra* note 149, at 75–76 (reporting that investment bankers used untested risk models in assembling subprime mortgage pools for asset-backed securities).

183. See *supra* text accompanying note 129.

quately documented.¹⁸⁴ Instead, it requests statistical data on characteristics of an entire pool such as yield, cash flows, interest rate sensitivity, total rate of return, and the financial impact of losses “based on a variety of loss or default experience, prepayment, interest rate and related assumptions.”¹⁸⁵ It does not require an audit of the underlying loans, but permits issuers to describe the overall characteristics of a pool, without checking to see if the pool includes sharks.¹⁸⁶ The information it asks for resembles that on which the rating agencies base their statistical models, and it requires more information on the servicer of the loan—the party that actually collects payments from mortgagors—than it does on the loans themselves.¹⁸⁷

Finally, it fails to deal with the rating that is a key element of every securitization. It does not require an agency rating asset-backed securities to reveal important information such as the data concerning an asset pool on which it relied in issuing a rating; when its statistical models were developed; the data on which they were based; divergences in data concerning a particular loan pool from the data on which the statistical models applied to it were based; or the record of the models for accuracy over the period preceding a given transaction, including long-term trends.

It should be stressed that this is a moving target. A model developed in 1996 for a pool of loans that were well documented and that required owner equity of 10 percent will not give accurate predictions for a 2005 pool including undocumented loans and loans with no mortgagor equity.¹⁸⁸ Moreover, even if the loans included in a particular 2005 pool *had* substantially the same risk as those used for a model constructed in 1996, the 1996 model would necessarily understate risk in 2005 because it would not include macroeconomic trends such as the sharply rising rate of consumer indebtedness.¹⁸⁹

184. Ginnie Mae, on the other hand, requires that all mortgages in any pool it guaranties meet the requirements for FHA, VA, or other government insurance, and requires each issuer to appoint a custodian for all documents concerning each of the loans in a pool. See U.S. DEP'T OF HOUS. & URBAN DEVELOPMENT, *supra* note 39, § 4-2(A).

185. 17 C.F.R. § 229.1101(a)(5); see also *id.* § 229.1111.

186. This is not a recent innovation. The SEC agreed to permit issuers of securities *with investment-grade ratings* to offer mortgage-backed securities on a “blind pool” basis—i.e., with only a generic description of mortgages in a pool being securitized—beginning in 1983. See David F. Seiders, *Residential Mortgage and Capital Markets*, in *THE HANDBOOK OF MORTGAGE BANKING: A GUIDE TO THE SECONDARY MORTGAGE MARKET* 21, 51 (James M. Kinney & Richard T. Garrigan eds., 1985).

187. See 17 C.F.R. § 229.1108.

188. See *American Mortgages: Bleak Houses*, *supra* note 149, at 75.

189. See Alexander Batchvarov, *Overview of the Structured Credit Markets: Trends and New Developments*, in *THE HANDBOOK OF STRUCTURED FINANCE*, *supra* note 159, at 1, 17.

2. *The Credit Rating Agency Reform Act of 2006*

CRARA¹⁹⁰ was the first statute to bring the rating agencies, whose ratings had long been used in rules made by the SEC and other federal agencies, expressly within the jurisdiction of the securities laws. It responded to complaints from other rating agencies about the oligopoly enjoyed by Moody's, S & P, and Fitch, because of the SEC's three decades of refusal to recognize any other agency as an NRSRO for purposes such as rating securities for compliance with broker capital requirements.¹⁹¹ It also responded to charges concerning conflicts of interest on the part of the agencies.¹⁹²

It originated in response to pressure from the public and the SEC, which was required by the Sarbanes-Oxley Act to study the rating system,¹⁹³ because of the rating agencies' failure to issue timely downgrades for failing corporations such as Enron.¹⁹⁴ For the impending failure of the CDO market, however, it was a classic case of too little and too late.

That CRARA was too late is hard to dispute: although the SEC had considered regulating the credit rating agencies at least since 1992, it issued only a series of no-action letters and proposed no formal regulations.¹⁹⁵ Even had CRARA been enacted in a more timely fashion, e.g., with Sarbanes-Oxley in 2002, critical analysis shows that, as a preventative measure against the CDO crisis, it was a house cat in a lion suit.¹⁹⁶

The Act addressed some of the concerns expressed in testimony before Congress while it was being considered. It responded to charges that the SEC had dragged its feet in recognizing agencies other than the established ones as NRSROs and had thereby inhibited competition among agencies, by establishing a procedure for any credit rating agency to register with the SEC as an NRSRO.¹⁹⁷ This rule precludes SEC delay in considering an agency's application by setting a 120-day deadline for a

190. Pub. L. No. 109-291, 120 Stat. 1327 (codified at 15 U.S.C. § 78o-7 (2006)).

191. See *The Ratings Game: Improving Transparency and Competition Among the Credit Rating Agencies: Hearing Before the Subcomm. on Capital Mkts., Ins. & Gov't Sponsored Enters. of the H. Comm. on Fin. Servs.*, 108th Cong. 31-34 (2004) [hereinafter *The Ratings Game*] (statement of James A. Kaitz, President and CEO, The Association for Financial Professionals), <http://financialservices.house.gov/media/pdf/108-110.pdf>; *The Ratings Game, supra*, at 52-54 (statement of Alex J. Pollock, Resident Fellow, The American Enterprise Institute); *The Ratings Game, supra*, at 55-58 (statement of Barron Putnam, President and Chief Economist, LACE Financial Corporation).

192. See statements cited *supra* note 191.

193. Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 702, 116 Stat. 745.

194. See *Rating the Rating Agencies: The State of Transparency and Competition: Hearing Before the Subcomm. on Capital Mkts., Ins. & Gov't Sponsored Enters. of the H. Comm. on Fin. Servs.*, 108th Cong. 64 (2003) [hereinafter *Rating the Rating Agencies*] (statement of Rep. Michael G. Oxley), <http://financialservices.house.gov/media/pdf/108-18.pdf>; *Rating the Rating Agencies, supra*, at 69-70 (statement of Rep. Paul E. Kanjorski).

195. See *Rating the Rating Agencies, supra* note 194, at 69-70 (statement of Rep. Paul E. Kanjorski).

196. This is not to disparage the noble house cat, who may fairly be described as a WMD—a Weapon of Mouse Destruction.

197. See *supra* note 191.

decision after an agency applies for accreditation.¹⁹⁸ Registration, while not mandatory, is essential for most rating agencies, because only securities rated by recognized NRSROs can be applied toward capital requirements in regulated businesses such as broker-dealers, banks, and thrifts.¹⁹⁹ Under CRARA, the number of registered U.S. agencies rose,²⁰⁰ but five were quickly swallowed up by Moody's, S & P, and Fitch.²⁰¹ The reasons why CRARA failed to generate the competition it sought lie partly in its own flaws: CRARA section 3 requires a credit rating agency to be in business for at least three years before the SEC can accredit it as an NRSRO.²⁰² Moreover, section 4 requires a registrant agency to provide written certifications from at least ten "qualified institutional buyers."²⁰³ These provisions create a Catch-22: securities that do not receive high ratings from agencies accredited as NRSROs cannot be used as regulatory capital and are therefore difficult to market;²⁰⁴ but an agency cannot be accredited unless it can rate securities for at least three years and get recommendations from at least ten satisfied clients.²⁰⁵ Effectively, this is difficult to overcome except by an already well-established agency such as A.M. Best, which already had substantial experience rating insurance companies,²⁰⁶ or by already well-established foreign agencies. Others, including the venerable Duff & Phelps, registered only to be absorbed by Moody's, S & P, and Fitch.²⁰⁷ Apart from flaws in the registration process, the market power of the existing rating agencies makes them well-known brands whose ongoing relationships with underwriters²⁰⁸ create a barrier to entry by newcomers.²⁰⁹

CRARA requires an agency to discuss its general methods and procedures in its registration application, but does not require it to disclose the data underlying its statistical models or other aspects of its methodology as applied to individual securities being rated.²¹⁰ It requires registered agencies to establish written policies "to address and manage any

198. 15 U.S.C. § 78o-7(a)(2)(B)(i)(II) (2006).

199. *See supra* note 105.

200. *See Proposed Rules, supra* note 47, at 36,213.

201. *See* DefaultRisk.com, Credit Rating Agencies, http://www.defaultrisk.com/rating_agencies.htm (last visited July 26, 2009).

202. 15 U.S.C. § 78c(a)(62)(A).

203. *Id.* § 78o-7(a)(1)(C)(i).

204. *See, e.g.,* Lowenstein, *supra* note 2, at 39.

205. *See supra* notes 202–03 and accompanying text.

206. *See* A.M. Best, Ratings & Analysis Center, <http://www3.ambest.com/ratings/default.asp> (last visited July 26, 2009).

207. *See* DefaultRisk.com, Credit Rating Agencies, http://www.defaultrisk.com/rating_agencies.htm (last visited July 26, 2009).

208. *See* Partnoy, *supra* note 98, at 628–36 (describing the rating agencies' "reputational capital"); Lowenstein, *supra* note 2, at 38–39.

209. Egan-Jones Ratings Co., accredited in 2007, follows the older model of relying on investor subscriptions. It remains to be seen whether it can take appreciable market share. *See* Egan-Jones Ratings and Analytics, <http://www.egan-jones.com> (last visited July 26, 2009).

210. 15 U.S.C. § 78o-7(a)(1)(B)(ii) (2006).

conflicts of interest that can arise from such business”²¹¹ and gives the SEC authority to regulate such conflicts.²¹² Finally, responding to concerns expressed prior to its passage,²¹³ it authorizes the SEC to promulgate and enforce rules to bar any NRSRO from any “unfair, coercive, or abusive” practice concerning the issuance of ratings, such as conditioning a rating on purchase of the agency’s services.²¹⁴

Otherwise, CRARA is actually counterproductive. It ignores many of the concerns expressed by the SEC (and rating agencies other than Moody’s and S & P), such as the lack of transparency in the rating process.²¹⁵ Instead, it limits the SEC’s authority to issue regulations to those “narrowly tailored” to the provisions of the Act,²¹⁶ and expressly forbids it to act in any way to regulate the methods used by the agencies in rating securities or any other aspect of the rating process.²¹⁷ Moreover, it limits sanctions for violations other than actual fraud to censure, denial, or suspension of an NRSRO’s registration.²¹⁸ The Act thus appears to be intended merely to enable agencies to register with the SEC, rather than to bring them fully within the purview of securities regulation. Even in cases involving fraud, where the SEC does have jurisdiction to act, the Act bars the courts from implying a private right of action,²¹⁹ thereby leaving enforcement to an agency that is already stretched to its limits in carrying out its primary missions.²²⁰

211. *Id.* § 78o-7(h)(1).

212. *Id.* § 78o-7(h)(2).

213. See *The Role of Credit Rating Agencies in the Capital Markets: Hearing Before the S. Comm. on Banking, Hous. & Urban Dev.*, 109th Cong. 55–56 (2005) [hereinafter *Role of Credit Rating Agencies*] (statement of Sean J. Egan, Managing Director, Egan-Jones Rating Co.) (expressing concern about the Moody’s-S & P “duopoly” and its failure to warn investors of credit problems with Enron, WorldCom, Global Crossing, and other troubled corporations, and charging coercion of issuers by rating agencies to obtain fees for ratings and other services); *Legislative Solutions Hearing*, *supra* note 117, at 102–10 (statement of Nancy Stroker, Group Managing Director, Fitch Ratings) (stating that Moody’s and S & P’s constituted a duopoly that used its market power to compel issuers to use their rating and other services, on threat of issuing lower unsolicited ratings).

214. 15 U.S.C. § 78o-7(i)(1).

215. See *Legislative Solutions Hearing*, *supra* note 117, at 108 (statement of Nancy Stroker, Group Managing Director, Fitch Ratings); *Role of Credit Rating Agencies*, *supra* note 213, at 56 (statement of Sean J. Egan, Managing Director, Egan-Jones Rating Co.); *Rating the Rating Agencies*, *supra* note 194, at 129, 132–34 (statement of Annette L. Nazareth, Director, Division of Market Regulations, U.S. Securities and Exchange Commission) (expressing concern about rating agency conflicts of interest and absence of transparency in rating process).

216. This is in striking contrast to the normal principal that the securities laws’ remedial purposes justify their broad construction in favor of the Commission. See, e.g., *SEC v. Ralston Purina Co.*, 346 U.S. 119, 126 (1953).

217. 15 U.S.C. § 78o-7(c)(2).

218. *Id.* § 78o-7(d).

219. *Id.* § 78o-7(m)(2).

220. The SEC has long supported private rights of action under the securities laws on grounds that it has too many matters before it to deal with all of them itself. See *J. I. Case Co. v. Borak*, 377 U.S. 426, 432 (1964).

II. THE MACHINE STOPS: THE SUBPRIME MORTGAGE CRISIS AND THE MELTDOWN OF THE CDO MARKET

As with a massive volcanic eruption, there were preliminary shockwaves that should have warned regulators of trouble ahead. Quite apart from academic critics whose attacks on structured finance, as noted above,²²¹ had little to do with the way in which the CDO market failed, events highlighted weaknesses in the assumptions of the rating agencies' statistical models that should have warned them and their customers of problems with the accuracy of their ratings for structured finance securities.

A. *Alarm Bells That Went Unheard*

The CDO meltdown that began in 2006 should not have surprised the financial community as it did. It was merely the largest bubble in a series, each of which showed some of the features of the climactic meltdown.

1. *The Bankruptcy of Criimi Mae*

The rating agencies, the financial press, and regulatory bodies that had become dependant upon the rating system ignored a warning from well before securitization left the main sequence of orderly development around 2003. This was the failure of Criimi Mae. Despite the deliberate resemblance of its name to those of the GSEs, Criimi Mae was an entirely private real estate investment trust (REIT), which at the time of its bankruptcy was one of the 200 largest businesses in the Washington, D.C. metropolitan area.²²² It filed for Chapter 11 reorganization on October 5, 1998.²²³

Criimi Mae invested chiefly in junior tranches of CDOs secured by mortgages on commercial properties, including apartment buildings, and played a major role in financing that sector of the real estate market.²²⁴ Its failure is particularly appropriate to consider in light of the larger crisis that began in 2006 not only because it demonstrated the risks inherent in relying on packages of subprime loans, but also because Criimi Mae engaged in hedging strategies reminiscent of the synthetic derivatives

221. See *supra* Section I.B.

222. See Tim Smart, *The Washington Post's Top 200 Companies*, WASH. POST., Apr. 26, 1999, § F16 (Insert), at 6.

223. See *In re Criimi Mae Inc.*, No. 98-23115-DK, 1998 Bankr. LEXIS 1624, at *2 (Bankr. D. Md. Dec. 14, 1998).

224. See *Criimi Mae's Return to Benefit Multifamily*, APARTMENT FINANCE TODAY (Hanley Wood, LLC, San Francisco, C.A.), July/Aug. 2001, available at <http://www.housingfinance.com/aft/articles/2001/01/JulyAugCriimiMae/index.html>.

used later in structured finance.²²⁵ These strategies failed to save it from disaster,²²⁶ and because of its key role in buying lower-rated tranches of asset-backed securities based on commercial real estate mortgages, its bankruptcy nearly collapsed the market for securitized commercial mortgages.²²⁷ Its failure demonstrated that one thousand bad asset-backed securities pooled together are as toxic as any of them individually—a lesson that the assemblers of CDOs during the peak period of 2004–2006 failed to learn. Ironically, Criimi Mae itself failed to learn from experience. After it confirmed a plan of reorganization and once again became a major participant in the market for debt of less than investment grade, exposure to more difficult times forced it into a merger with a Canadian company in 2006.²²⁸

2. *Junk Bond Blues*

Another flavor of debt securities should also have provided a source of caution for the CDO market. This was the market for high-yield debt securities, better known as “junk bonds.”²²⁹ Junk bonds are corporate debt securities that are either unrated or rated below investment grade. Ironically, the rating system proved accurate for the junk bond market; but the market failed in ways that should have been instructive for both the agencies rating CDOs and regulatory authorities.

Junk bonds began as “fallen angels,” i.e., corporate bonds that were issued with investment-grade ratings but, because of corporate financial reverses, had been downgraded to below investment grade.²³⁰ During the 1980s, investment bankers led by Michael Milken of the late unlamented Drexel Burnham Lambert discovered a new market: corporations that would formerly have borrowed from banks could borrow more cheaply and with fewer restrictive covenants by going to the securities markets and issuing debt securities that started life as junk bonds—either because they were unrated or received ratings below investment grade.²³¹ Corporations could also pile on more debt than formerly, because they could issue senior debt securities with investment-grade ratings and also junk bonds that were subordinated to the investment-grade securities, which attracted investors because their higher risks carried with them higher rates of return. Because senior securities could rely on prior access to

225. In fact, because many CDOs collateralized by asset-backed securities or other CDOs are actively managed, Criimi Mae resembled an enormous CDO. See *Proposed Rules*, *supra* note 47, at 36,216.

226. See *In re Criimi Mae, Inc. Sec. Litig.*, 94 F. Supp. 2d 652, 655 (D. Md. 2000).

227. See Maryann Haggerty, *Criimi Mae Files Plan with Court*, WASH. POST, Sept. 10, 1999, at E1.

228. See Kevin James Shay, *Bankruptcies up Amid Downturn*, GAZETTE.NET, Nov. 27, 2008, http://www.gazette.net/stories/11272008/businew171836_32470.shtml.

229. See Richard E. Mendales, *The New Junkyard of Corporate Finance: The Treatment of Junk Bonds in Bankruptcy*, 69 WASH. U. L.Q. 1137, 1142–44 (1991).

230. *Id.* at 1142–43.

231. *Id.* at 1143; see also Tomlinson & Evans, *supra* note 2.

cash flows due to subordinated debt, they enjoyed higher ratings than the issuer would have received if it issued all its debt at the same order of priority. This multilayered structure anticipated the “waterfall” model for asset-backed securities issued in multiple tranches.

For investors, the argument was made that a diversified portfolio of junk bonds would offer a higher yield than investment-grade debt securities, but because of the diversification would not carry a correspondingly high degree of risk. It was on this premise that the first CDOs, using junk bonds to generate their cash flows, were assembled in 1987 by none other than Michael Milken.²³²

Though this is true for a portfolio of junk bonds that simply pose greater than investment-grade risks, it has important problems that are instructive in view of the later CDO meltdown. Junk bonds are not created equal. Some simply have a predictably higher than investment-grade risk of default, but others bear qualitatively different risks, which in some cases represent a near certainty of default. As the junk bond enthusiasm of the 1980s increased and junk bonds were used for highly leveraged transactions such as hostile takeovers, junk bonds were issued by corporations with increasingly heavy debt burdens and with more exotic features such as “pay in kind” coupons, under which, at least for the first few years after issue, holders received their interest in additional junk bonds rather than cash.²³³ As a colleague remarked to me, “We’ve gone from junk to garbage.” A portfolio of garbage cannot reasonably expect to escape the dumpster.

It is also instructive that junk bonds, by their nature, are more sensitive than investment-grade securities to systemic economic conditions in the industries where their issuers do business. The classic example is that of junk bonds issued by businesses such as retailers, whose cash flow is unusually sensitive to changes in the general economy.

Junk bonds crashed not once but twice before the new century. The first crash occurred after a frenzy that took garbage to new lows in 1988–1989; and like the current CDO crisis, the crash severely stressed the entire U.S. economy.²³⁴ Even sophisticated investors were injured. American Express had to write down more than \$1 billion worth of junk bond holdings, and its CEO, Ken Chenault, admitted that it “did not fully comprehend the risk” involved in its junk bond investments.²³⁵ Drexel

232. Tomlinson & Evans, *supra* note 2. These are sometimes known as “CBOs,” or collateralized bond obligations. See Batchvarov, *supra* note 189, at 10 (speaking of CDOs based on junk bonds in the past tense); Partnoy & Skeel, *supra* note 10, at 1027–28 (stating that CDOs enable investors to access an investment not previously available, a diversified position in high-yield debt).

233. See Anise C. Wallace, *‘Junk Bond’ Prices Fall on Worry over Drexel*, N.Y. TIMES, Feb. 13, 1990, at D24.

234. See generally JOHN ROTHSCHILD, GOING FOR BROKE: HOW ROBERT CAMPEAU BANKRUPTED THE RETAIL INDUSTRY, JOLTED THE JUNK BOND MARKET, AND BROUGHT THE BOOMING EIGHTIES TO A CRASHING HALT (1991).

235. See Sheryl Jean, *Amex’s Junk Bond Mess: Firm ‘Did Not Fully Comprehend the Risk,’* ST. PAUL PIONEER PRESS, July 28, 2001, at C1.

Burnham itself, facing not only the junk bond collapse but criminal charges, perished in the fall.²³⁶

The first junk bond crash did not deter junk bonds from taking off again during the next decade, as the recession receded. Recovery was slow at first,²³⁷ but then accelerated. Portfolio managers claimed that the new, improved junk bonds were “healthier” than those of the fevered 1980s.²³⁸ Confidence in these instruments, which blossomed at the same time high-technology stocks were taking off, reached the point that by 1997, “high yield” corporate debt carried a premium of just 2.85 percent over U.S. Treasury securities, indicating strong investor confidence in the former.²³⁹ As before, this confidence was misplaced.

The second crash, beginning in 1998, originated in global shocks, particularly the default of the Russian government.²⁴⁰ These caused a general “flight to quality,” which stressed the junk bond market in general and, even more, junk bond derivatives such as CDOs.²⁴¹ This led to events that anticipated the current CDO crisis in ways that should have been instructive both to regulators and rating agencies. The Long-Term Capital Management hedge fund followed its computer models rather than reality in keeping highly leveraged positions in securities²⁴² that included Russian government obligations that defaulted in 1998.²⁴³ This led it to the brink of insolvency, threatening U.S. financial markets generally because of the fund’s obligations to counterparties in high-volume swap transactions.²⁴⁴ Long-Term Capital Management was bailed out by a syndicate of financial institutions led by the Federal Reserve Bank of New York—but regulators and rating agencies appear not to have learned from the flirtation with disaster.²⁴⁵

236. See *Drexel Gives Up the Ghost*, BUS. WEEK, Mar. 7, 1994, at 6.

237. See *U.S. Junk Bonds Twitching in Morgue*, GLOBE & MAIL (Toronto), Apr. 1, 1991, at B6.

238. Andrew Leckey, *Investors No Longer Trashing Junk Bonds*, CHI. TRIB., Aug. 10, 1997, § 5, at 3.

239. See *id.*

240. See Kevin Dowd, *Too Big to Fail? Long-Term Capital Management and the Federal Reserve*, CATO INSTITUTE BRIEFING PAPERS, No. 52, at 3–4 (1999).

241. Cf. Jean, *supra* note 235.

242. A leveraged position is one that depends largely on borrowed funds rather than firm capital. Leverage amplifies profits from successful investments, but it correspondingly amplifies losses where investments go sour. Thus, many of the leveraged buy-outs of the 1980s led to Chapter 11 reorganizations in the 1990s.

243. See Thayer Watkins, Long Term Capital Management, <http://www.sjsu.edu/faculty/watkins/ltem.htm> (last visited July 26, 2009).

244. See *id.*

245. See Dowd, *supra* note 240, at 5, 10; see also Edward I. Altman, *The Anatomy of the High Yield Bond Market: After Two Decades of Activity—Implications for Europe* 16 (N.Y.U. Ctr. for Law & Bus., Working Paper No. 98-021, 1998), <http://pages.stern.nyu.edu/~ealtman/anatomy.pdf>.

B. What Goes Up Must Come Down: The Credit Balloon and the Failure of Regulation

1. The Dot-Com Bubble and the Flood of New Credit

Not long after Long-Term Capital's close encounter with insolvency, U.S. financial markets suffered a new round of instability. Unlike more serious financial debacles such as the savings and loan crisis of the early 1980s and the CDO meltdown that began in 2006, this was a traditional stock market boom and bust: the "dot-com bubble." Like other market spees since the Dutch tulip frenzy of the seventeenth century,²⁴⁶ the dot-com bubble led investors to bid up prices of a class of assets (in this case the shares of companies involved with information technology) to levels far above readily ascertainable value, based on what former Federal Reserve Chairman Alan Greenspan, well before the bubble reached its peak rate of expansion, famously called "irrational exuberance."²⁴⁷

When the bubble burst, the precipitous drop in technology stocks erased roughly \$5 trillion in investment value.²⁴⁸ The severity of the explosion pushed the entire U.S. economy, including sectors not directly concerned with information technology, into recession.²⁴⁹ To the time of this writing, the NASDAQ index that included most of the "dot-com" stocks has floated below half the levels it reached before the bubble burst in 2000.²⁵⁰

2. The Bubble in the Housing Market and the Failure of the Rating Agencies

An important effect of the "dot-com" crisis was that it pushed the Federal Reserve into flooding the financial markets with easy credit in an effort to forestall a major recession.²⁵¹ This flood of credit, combined with the flaws already noted in the CDO markets, gave birth to a housing bubble accompanied by a new and enormous generation of CDOs based

246. Christian C. Day, *Risky Business: Popular Images and Reality of Capital Markets Handling Risk—From the Tulip Craze to the Decade of Greed*, 113 PENN. ST. L. REV. 461, 463–74 (2008).

247. See Alan Greenspan, Chairman, Fed. Reserve, The Challenge of Central Banking in a Democratic Society, Remarks at the Annual Dinner and Francis Boyer Lecture of The American Enterprise Institute for Public Policy Research (Dec. 5, 1996), available at <http://www.federalreserve.gov/boarddocs/speeches/1996/19961205.htm>.

248. See Chris Gaither & Dawn C. Chmielewski, *Fears of Dot-Com Crash, Version 2.0*, L.A. TIMES, July 16, 2006, at A1.

249. See *id.*

250. The NASDAQ index reached an all-time closing high of 5,048.62 on March 10, 2000. Finfacts Team, *Fifth Anniversary: Nasdaq's Record All-Time Closing High 5,048.62*, FINFACTS IRELAND, Mar. 8, 2005, http://www.finfacts.com/irelandbusinessnews/publish/article_100076.shtml. At this writing, the index languishes just above 1800.

251. See Larry Elliott, *Six Years Ago the Dotcom Bubble Burst: Now Markets Are Soaring Again*, GUARDIAN, May 9, 2006, <http://www.guardian.co.uk/business/2006/may/09/moneyinvestments.stockmarkets#history-byline>.

on mortgage-backed securities, leading eventually to the great meltdown that began in 2006.

Mortgages were issued to home purchasers who would not previously have qualified for such credit. This applied even to mortgages insured by the FHA, which gradually relaxed the requirement for a mortgagor's equity from the once exalted level of 20 percent²⁵² down to 3 percent, and then permitted mortgagors to finance even this minimal down payment.²⁵³ The GSEs followed suit by allowing mortgagors to finance 3 percent down payments, effectively making no down payments.²⁵⁴ This relaxation was highly significant for a number of reasons. A substantial down payment is a good indication of a mortgagor's ability to make payments on a mortgage and gives the mortgagor a strong incentive not to simply walk away from the house.²⁵⁵ Moreover, if the mortgagor defaults, the mortgage holder will recover a larger percentage of the loan value on foreclosure. Finally, a fixed percentage down payment requirement will rise with the price of homes, so that housing prices will tend not to rise out of proportion to incomes, as occurred in the 2004–2006 housing bubble.²⁵⁶

In a sense, the FHA and GSEs were accepting mortgages that by earlier standards would have been “subprime.”²⁵⁷ The real situation was even worse, however. Mortgage lenders and brokers other than traditional banks and thrifts appeared, who, unlike the latter, were not subject to state or federal regulation and were therefore able to make even riskier loans than regulated entities. From 2004 to 2006, unregulated mortgage brokers and lenders made a substantial percentage of all U.S. mortgage loans, over 50 percent of which were officially considered “subprime.”²⁵⁸

This led to a vicious circle like those seen in prior bubbles, in which the greater availability of mortgages increased the demand for homes, pushing up the prices at which they were sold and in turn pushing up the amounts lent to their purchasers. By 2006, the volume of new mortgage

252. See, e.g., FED. RESERVE BD., LOOKING FOR THE BEST MORTGAGE 3, available at http://www.federalreserve.gov/pubs/mortgage/mortb_1.htm.

253. See *Standards*, *supra* note 155, at 33,942.

254. See Fannie Mae, Mortgages with Little or No Down Payment, <https://www.efanniemae.com/sf/mortgageproducts/fixed/flex97100.jsp> (last visited July 26, 2009). One result of this is that the GSEs themselves have become insolvent. See *supra* note 43.

255. See Baron, *supra* note 73, at 85 (indicating that the higher the loan-to-value ratio of a mortgage, the more likely the mortgage was to default, with the rate of default reaching 100 percent when the mortgagor had no equity in the mortgaged home).

256. See Timiraos, *supra* note 157.

257. Fannie Mae and Freddie Mac have suffered the same consequence as other holders of subprime debt; as a result of high default rates, both have become insolvent. See *supra* note 43.

258. See DEP'T OF THE TREASURY, BLUEPRINT FOR A MODERNIZED FINANCIAL REGULATORY STRUCTURE 6 (Mar. 2008), <http://www.treas.gov/press/releases/reports/Blueprint.pdf>; Lowenstein, *supra* note 2, at 38.

lending passed \$2.5 trillion, and, as noted, a substantial percentage of mortgages issued during the peak period were subprime.²⁵⁹

Worse yet, many of them were not fixed-rate, like the old standard model, but adjustable. Adjustable rate mortgages had an honorable origin: Fannie Mae and Freddie Mac developed them as an alternative to fixed rate mortgages, offering borrowers rates that were somewhat lower than fixed rate mortgages, but which could be raised with inflation to assure a constant real rate of return to the lender.²⁶⁰ These loans protected borrowers with lifetime caps on the rates that could be charged.²⁶¹ During the new housing bubble, however, unregulated lenders transformed them into a malignant subprime form with built-in rate increases not based on inflation. Rather, mortgages of this ilk were offered at low “teaser” rates to mortgagors who could afford those rates, but could not afford later “resets” to much higher rates that were built into the new mortgages—leading to almost certain default at the reset date.²⁶² The dubious premise for such loans was that because home prices would continue to rise, marginal borrowers would be able to refinance at rates they could afford. Worse yet, Fannie Mae and Freddie Mac, faced with competition from private-label mortgage-backed securities, began to accept loans with these new elevated levels of risk, although they did not fit the GSEs’ models, which are based on plain vanilla mortgage loans.²⁶³

Nor did this exhaust the excesses of the new housing bubble. Many loans were made with little or fraudulent documentation to borrowers who could not afford them.²⁶⁴ These included “liar” loans, where mortgage originators did not ask for, or did not review, their borrowers’ documentation and winked at incredible representations of ability to pay,²⁶⁵ and “ninja” loans—“No income, no job, no assets.”²⁶⁶ This was the

259. See Lowenstein, *supra* note 2, at 38.

260. See PAVEL, *supra* note 32, at 50–51, 76–77.

261. See *id.* at 76.

262. See Ilaina Jonas, *Mortgage Reset May Boost Foreclosures*, REUTERS, Mar. 19, 2007, <http://www.reuters.com/articlePrint?articleId=USN1924323920070319>. It should be noted that Ginnie Mae will not guaranty pools that include mortgages with planned refinancing—what mortgage brokers would call mandatory resets. See U.S. DEP’T OF HOUS. & URBAN DEV., *supra* note at 39, § 9-2(G).

263. See Duhigg, *supra* note 53.

264. Inadequate documentation is poisonous to mortgage-backed securities not only because the lender, and buyers from the lender, lack adequate information, but also because an unrecorded mortgage may be avoided in the bankruptcy of the mortgagor. See 11 U.S.C. § 544(a)(3) (2006). Even outside bankruptcy, courts will not foreclose against property without adequate documentation that a securitization trust owns the notes for its pooled mortgages. See Gretchen Morgenson, *Judge Demands Documentation in Foreclosures*, N.Y. TIMES, Nov. 17, 2007, at C8 (reporting that courts refused to hear foreclosure cases in absence of documentation that trustee for pool of mortgages actually owned the underlying mortgagors’ notes).

265. See *In re Hill*, No. 07-41137, 2008 WL 2227359 at *5 (Bankr. N.D. Cal. May 23, 2008) (finding that debtors’ “liar” loan was dischargeable in bankruptcy because bank’s failure to conduct due diligence made its reliance on debtors’ misrepresentation of their financial condition unreasonable); *Liar Loan*, INVESTOPEDIA, http://www.investopedia.com/terms/l/liar_loan.asp (last visited July 26, 2009).

266. This designation was actually provided on a loan application form prepared by a mortgage broker. HCL Finance, Inc., NINJA Loan Submission, <https://broker.hclfinance.com/downloads/NINJASStack.pdf> (last visited July 26, 2009); see also Steven Pearlstein, “No Money Down” Falls Flat,

equivalent of the transition of corporate debt from junk to garbage a decade or so earlier, but on a much larger scale.²⁶⁷

The hot air in the balloon may have been heated further by the enactment of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (BAPCPA),²⁶⁸ which made it significantly more difficult for individuals to file for bankruptcy under Chapter 7 of the Bankruptcy Code. The originators of mortgages and other consumer debt, as well as buyers of the debt on the secondary market, may have believed that this strengthened the repayment prospects of consumer debt in general. This belief was mistaken,²⁶⁹ but the strength and tenacity with which the consumer credit industry lobbied for the changes indicates that the industry believed otherwise.²⁷⁰ This may have contributed to the bubble psychology, well known to investors from the time of the South Sea Bubble in 1719²⁷¹ up through the just deflated housing bubble.

The bubble continued to expand despite the declining quality of mortgages (and other loans) after 2004. The decline in the quality of debt did not prevent it from being packaged into asset-backed securities, nor did it prevent the rating agencies from giving a top rating to at least one tranche from each pool, thereby qualifying it to be counted as capital of banks, brokerages, and other financial institutions.²⁷² This was true even if all of the collateral underlying an asset-backed tranche was considered “subprime,” i.e., represented mortgages falling below FHA standards.²⁷³

The problem for the rating agencies was that, even apart from conflicts of interest, their statistical models no longer fit the dynamics of the market. Neil D. Baron, describing Fitch’s models in 1996, wrote that they reflected not only losses under normal conditions, but a “stress test” based on Texas in the 1980s, when oil prices dropped and home prices

WASH. POST, MAR. 14, 2007, at D01. Though technically speaking, this kind of loan is simply nonre-course financing of the kind seen before in business finance, with payment assured by the rising value of the real estate collateral, in actuality foreclosure proceedings are slow and expensive, and foreclosure sales generally realize far less than the actual value of the properties sold, even under normal market conditions. See, e.g., Bernard Condon, *Fire Sale*, FORTUNE, Apr. 7, 2008, at 40, available at <http://www.forbes.com/global/2008/0407/020.html>.

267. See *supra* text accompanying note 233.

268. Pub. L. No. 109-8, 119 Stat. 23.

269. Even if a mortgagor or other individual debtor files for bankruptcy under Chapter 7, if the value of the property securing the debt is less than the debt—an unfortunate fact for most subprime borrowers in the crunch that began in 2006—the mortgagee may ask the bankruptcy court to lift the automatic stay imposed by bankruptcy on collection actions under Bankruptcy Code § 362(d), and release the collateral to it. The creditor will then be subject to the same problems imposed by a forced sale into a thin market that it would encounter outside bankruptcy. BAPCPA’s tightening of requirements for individual filings under Chapter 7, therefore, may save creditors some cost and delay, but not major losses inherent in the foreclosure process.

270. See, e.g., *Bankruptcy Bill Advances*, L.A. TIMES, Mar. 11, 2005, at A18 (reporting that congressional and industry supporters had been pushing bill for more than eight years).

271. See JESSE H. CHOPER, JOHN C. COFFEE, JR. & RONALD J. GILSON, *CASES AND MATERIALS ON CORPORATIONS* 18 (7th ed. 2008).

272. See Lowenstein, *supra* note 2, at 38–40.

273. See *id.*

dropped by as much as 55 percent.²⁷⁴ The problem with this was that in Texas at that time, mortgagors usually had some equity in their homes, and many of these mortgagors continued payments on their mortgages.²⁷⁵ It is highly significant that mortgagors in Baron's "stress test" who lost *all* their equity had a 100 percent default rate.²⁷⁶

The inadequacy of the rating system should have been clear from data available before the crash. Top ratings, supposed to indicate a strong capacity to pay principal and interest, were inconsistent as between different types of debt securities. Looking at Moody's system, 2.2 percent of corporate bonds rated Baa (the lowest investment-grade rating) defaulted for each five-year period from 1983 to 2005.²⁷⁷ For CDOs with the same rating, however, the average five-year default rate from 1993 to 2005 (before the housing bubble burst) was 24 percent.²⁷⁸ It is also noteworthy that for municipal bonds with the same rating, the five-year default rate was only 0.097 percent.²⁷⁹

In the new housing bubble, what were called "subprime" loans did not fit the historic model of documented loans to mortgagors with a checkered credit history. Instead, they included loans to mortgagors with no equity as well as loans that were completely undocumented. These loans were therefore prone to fraud—both by mortgagors overstating their incomes²⁸⁰ and by inflated appraisals of mortgaged property—or were time bombs due to reset at rates above mortgagors' ability to pay.²⁸¹ Therefore these were not merely loans with a higher than normal likelihood of default, but which had a near certainty of default.

Thus, as it expanded, the edge of the bubble approached a sharp needle.

C. *The Balloon Bursts: The Subprime Crisis and the CDO Meltdown*

The crisis began as lending practices reached their highest level of irresponsibility in 2003–2006. Mortgagors began to default even before the end of this period.²⁸² The first of these were debtors holding "subprime" mortgages and home equity loans.

274. See Baron, *supra* note 73, at 85.

275. See *id.* (comparing mortgages with 60 percent, 90 percent, and 100 percent loan-to-value ratios).

276. See *id.*

277. Richard Tomlinson & David Evans, *The Ratings Charade*, BLOOMBERG, July 2007, <http://www.bloomberg.com/news/marketsmag/ratings.html>.

278. *Id.*

279. See *Rating Agencies Hearing*, *supra* note 49, at 18 (statement of Joseph R. Mason, Associate Professor of Finance, Drexel University).

280. See *In re Hill*, No. 07-41137, 2008 WL 2227359, at *4 (Bankr. N.D. Cal. May 23, 2008).

281. See Michael Harrington, *Real Estate Bust: America's House of Cards*, ASSOCIATED CONTENT, Feb. 21, 2008, http://www.associatedcontent.com/article/616177/real_estate_bust_americas_house_of.html?cat=54.

282. See *Proposed Rules*, *supra* note 47, at 36,216–17 (indicating that mortgagors on loans made in 2006–2007 began to default within months after the loans were made).

1. *Hedge Funds in Distress*

Hedge funds, like junk bonds, are old devices that suddenly took off to rattle world financial markets. Originally, they were privately held (and therefore unregulated) funds owned by small groups of wealthy investors, which invested in futures contracts and other financial devices to hedge against future changes in the financial markets.²⁸³ By the 1990s, although they remained privately held and thus largely exempt from regulation by the SEC or Commodities Futures Trading Commission (CFTC),²⁸⁴ they assumed new importance, as major financial institutions took stakes in them or used them as counterparties in swap transactions, and their goals went from mere hedging to seeking above-market returns on investments ranging from real estate and conventional securities to high-order derivatives.²⁸⁵

As hedge funds expanded during the 1990s, they acquired assets with increasingly exotic structures, ranging from CDOs to credit default swaps and “synthetic” CDOs backed by derivative obligations, rather than by instruments yielding direct cash flows such as asset-backed securities. Their extensive leverage made them more sensitive than other financial institutions to investment losses,²⁸⁶ and the failure of a large hedge fund such as Long-Term Capital Management, because of its swap transactions with major financial institutions, made its failure potentially contagious.²⁸⁷

This sensitivity made hedge funds the first victims of the CDO crisis. Two hedge funds managed by Bear Stearns, formerly the fifth largest U.S. investment bank, failed in late 2006 when their portfolios of CDOs began to experience high rates of default on the underlying subprime mortgages.²⁸⁸ The collapse of the hedge funds brought Bear Stearns itself

283. See U.S. Securities and Exchange Commission, *Hedging Your Bets: A Heads Up on Hedge Funds and Funds of Hedge Funds*, Mar. 26, 2008, <http://www.sec.gov/answers/hedge.htm>; PBS, *Hedge Funds 101*, Apr. 13, 2007, <http://www.pbs.org/now/shows/315/hedge-funds.html>.

284. The SEC required certain advisers to hedge funds to register as investment advisers in 2005, but the funds themselves were still not required to register under the 1933 or 1940 Acts. See Registration Under the Advisers Act of Certain Hedge Fund Advisers, Investment Advisers Act Release No. IA-2333, 69 Fed. Reg. 72,054 (Dec. 10, 2004) (to be codified at 17 C.F.R. pts. 275, 279).

285. The number of hedge funds increased from 530 in 1990 to over 6,700 in 2005. See CTR. FOR INT'L SEC. & DERIVATIVES MKTS., THE BENEFITS OF HEDGE FUNDS: 2006 UPDATE 1, 4, <http://cisdm.som.umass.edu/research/pdffiles/BenefitsofHedgeFunds081906.pdf>. A key factor in the explosive growth of hedge funds during the 1990s was the National Securities Markets Improvement Act of 1996, which eased an earlier exemption from registration under the Investment Advisers Act of 1940 that specified that an exempt fund could have no more than 15 clients. See 15 U.S.C. § 80b-3a(a)(1) (2006).

286. See *supra* note 242.

287. When Long-Term Capital Management failed, it had over \$100 billion in assets, but its obligations to banks and other institutions on derivative contracts exceeded \$1 trillion. See generally ROGER LOWENSTEIN, WHEN GENIUS FAILED: THE RISE AND FALL OF LONG-TERM CAPITAL MANAGEMENT (2000).

288. See Jeannine Aversa, *Fed Aided Wall Street to Avert “Contagion,”* USA TODAY, June 27, 2008, http://www.usatoday.com/money/economy/2008-06-27-483413484_x.htm.

close to insolvency by March 2007.²⁸⁹ Because Bear Stearns was a counterparty on large-value transactions such as swaps with numerous investment and commercial banks, its potential failure was a threat to worldwide markets.²⁹⁰ The magnitude of risk led the Federal Reserve to give Bear Stearns emergency financing on March 14, contrary to its normal practice of lending only to commercial banks, and two days later arranged its emergency takeover by Morgan Stanley.²⁹¹ The subprime credit crisis was on.

2. *The Subprime Mortgage Fiasco and Chaos in the Financial Markets*

Like many crises, the CDO meltdown began in an obscure corner of the market. Subprime mortgages were originally mortgages that failed to meet GSE standards, even with the relaxation of GSE standards such as mortgagor equity requirements that came with the housing bubble.²⁹² Originally, many of them posed risks not much worse than those of “prime” mortgages. These included, for example, “jumbo” mortgages that exceeded the maximum amounts allowed by the GSEs but otherwise would have qualified for GSE pools.²⁹³ In areas such as California where both housing and income exceeded the national average, such mortgages might not be out of proportion to the mortgagors’ ability to make regular payments. Unfortunately, however, the growth of subprime mortgages during the housing bubble differed from traditional mortgage lending in new ways based on securitization: it was driven by an “originate to distribute” business model, in which unregulated mortgage brokers and lenders made loans with the intent to sell them on the secondary market and thus with less concern for risk than traditional, regulated lenders.²⁹⁴

Thus, as the quality of mortgages generally fell, “subprime” mortgages issued in 2004–2006 were often made without regard to creditworthiness, based on misrepresentations by mortgagors and inflated appraisals of mortgaged property, and with features such as built-in “resets” of interest rates after fixed periods to levels beyond what mortgagors could afford. Mortgages of this kind were outside the predictive power of the stochastic models used by rating agencies, investment banks, and hedge funds.

When defaults began on subprime mortgages backing CDOs, hedge funds that held them, because of their extensive leverage, faced insolvency, putting pressure on participants such as Bear Stearns in the United

289. *Id.*

290. See *The Counterparty's Over: Brokers May Now Be a Bigger Risk*, *ECONOMIST*, June 14, 2008, at 87.

291. See Aversa, *supra* note 288.

292. See *Possible Responses to Rising Mortgage Foreclosures: Hearing Before the H. Comm. on Fin. Servs.*, 110th Cong. (2007) (statement of Daniel H. Mudd, President and CEO, Fannie Mae), <http://financialservices.house.gov/hearing110/htmduddo41707.pdf>.

293. Amy Hoak, *The Return of Jumbo Mortgage*, *WALL ST. J.*, Apr. 5, 2009, at 5.

294. See *Proposed Rules*, *supra* note 47, at 36,213–14.

States and Northern Rock in the United Kingdom.²⁹⁵ At Bear Stearns, managers of its two troubled hedge funds, trying to keep them afloat, may have misrepresented the funds' liquidity in inducing large investors to invest new money to keep the funds solvent.²⁹⁶ Despite the infusion of \$4 billion in new funds from the Bank of America in May 2007, investors began trying to redeem their investments in the funds—and the contagion spread to a run on the bank at Bear Stearns itself.²⁹⁷ At this point, institutions throughout the world that had bought CDOs based on AAA or similar ratings realized that large parts of their capitalization were based on instruments that, because their ratings did not accurately reflect the quality of their underlying mortgages, could not be valued. Confidence in AAA-rated CDOs vanished, and the crisis could not be contained despite the efforts of central banks.²⁹⁸ It deepened when the rating agencies, after the fact, began to review and downgrade the issues to which they had previously given top ratings. By February 2008, Moody's had downgraded at least one tranche of 94.2 percent of all the subprime issues that it had rated in 2006.²⁹⁹

The contagion spread when "Alt-A" mortgages³⁰⁰ began to follow their subprime cousins into default. Even prime mortgages such as those insured by the FHA and securities issued by Fannie Mae and Freddie Mac, which had loosened their standards, had to be written down.³⁰¹ Although financial institutions wrote down the value of their CDOs by amounts that totaled hundreds of billions of dollars, they had no way of knowing whether they—or counterparties in interbank lending—were adequately capitalized. The results were catastrophic: Fannie Mae and

295. Northern Rock had depended on securitization of its mortgages more than any other British bank. When the subprime meltdown began across the Atlantic, Northern Rock was unable to proceed with planned securitizations, and its depositors began a run which ultimately led to its nationalization. See *Northern Rock: Lessons of the Fall*, *ECONOMIST*, Oct. 20, 2007, at 91–93; Lionel Laurent, *Northern Rock Nationalized*, *FORBES*, Feb. 17, 2008, http://www.forbes.com/2008/02/17/northern-nationalize-bank-markets-cx_ll_0217northernrock.html.

296. Although hedge funds are not subject to most provisions of the securities laws, fraud relating to the sale of any security is a crime under section 10(b) of the 1934 Act. Two managers of the Bear Stearns hedge funds, Ralph Cioffi and Matthew Tannin, have been indicted for securities fraud for alleged misrepresentations to large investors such as the Bank of America to induce them to guarantee pools of subprime mortgages. See Matthew Goldstein & David Henry, *Bear Scandal: A Widening Probe*, *BUS. WK.*, July 7, 2008, at 22.

297. See *id.*

298. The crisis may have been aggravated because CDOs were mostly traded over the counter rather than on exchanges. When dealers who made markets in CDOs lost confidence in their ratings, they simply stopped buying them, making them completely illiquid. See Whalen, *supra* note 171.

299. See *Proposed Rules*, *supra* note 47, at 36,217.

300. "Alt-A" mortgages are those ranked above those considered to be subprime, but which still represented greater credit risks and lower levels of documentation than mortgages that would be acceptable to Fannie Mae or other GSEs. See Michael Shedlock, *Bring on the Alt-A Downgrades*, *SEEKING ALPHA*, May 30, 2008, <http://seekingalpha.com/article/79491-bring-on-the-alt-a-downgrades> (reporting that S & P downgraded 1326 Alt-A mortgage-backed securities, reflecting \$33.95 billion in issuance value and placed another 567 on credit watch; all had originally been rated AAA).

301. See Stephen Labaton & Steven R. Weisman, *U.S. Weighs Takeover of Two Mortgage Giants*, *N.Y. TIMES*, July 11, 2008, at A1; Katie Brenner, *The Fannie and Freddie Doomsday Scenario*, *CNNMONEY.COM*, http://money.cnn.com/2008/07/09/news/companies/benner_fanniefreddie.fortune/.

Freddie Mac became insolvent and had to be placed in conservatorship,³⁰² while banks around the world became reluctant to continue normal lending to each other, leading to a global credit crunch.³⁰³ Despite massive interventions by the U.S. Treasury, the Federal Reserve, and other central banks, the ultimate outcome is uncertain as of this writing.

III. DEALING WITH THE CRISIS AND PREVENTING ANOTHER

A. *Ad Hoc Measures to Deal with the Crisis*

The first response to the crisis by government agencies and central banks was necessarily ad hoc. Central banks acted rapidly to prevent the insolvency of financial institutions such as Bear Stearns in the United States and Northern Rock in the United Kingdom, which held large reserves of CDOs and were counterparties on far larger values of credit default swaps ultimately traceable to CDO collateral. The Federal Reserve gave critical support to Morgan Stanley's takeover of Bear Stearns, and the United Kingdom nationalized Northern Rock outright.³⁰⁴ As the crisis grew in scope, the central banks began to act as sources of liquidity by buying up CDOs that were becoming unmarketable.³⁰⁵ Moreover, the Federal Reserve opened its lending window, normally open only to commercial banks, to provide liquidity to investment banks, for the first time since the Great Depression.³⁰⁶ Finally, faced with a possible freezing of the entire credit system, Congress authorized a \$700 billion "bailout" package, largely to recapitalize weakened banks in order to restore confidence in the financial system.³⁰⁷ Other countries quickly followed suit.³⁰⁸

Professor Steven L. Schwarcz has proposed that this kind of response be made a permanent part of the financial landscape: that central banks such as the Federal Reserve should be given power, presumably by statute, to steady markets on the brink of collapse by acting as "liquidity

302. The Federal Housing Finance Agency, acting under authority provided by the Housing and Economic Recovery Act of 2008, Pub. L. No. 110-289, 122 Stat. 2654, placed the GSEs under conservatorship on September 7, 2008, largely to assure payment of debt that they had issued or guaranteed in an amount exceeding \$5 trillion. See MARK JICKLING, CONGRESSIONAL RESEARCH SERVICE, FANNIE MAE AND FREDDIE MAC IN CONSERVATORSHIP 2-4 (2008).

303. See, e.g., Eric Pfanner, *Global Credit Crunch Reaches New Dimension*, N.Y. TIMES, Sept. 14, 2007, <http://www.nytimes.com/2007/09/14/business/worldbusiness/14iht-mortgage.4.7511183.html?pagewanted=2&r=1>.

304. See Laurent, *supra* note 295.

305. Ben S. Bernanke, Chairman, Bd. of Governors of the U.S. Fed. Reserve, Speech at the Federal Reserve Bank of Atlanta Financial Markets Conference (May 13, 2008), <http://www.bis.org/review/r080514a.pdf>.

306. Scott Lanman, *Bernanke Says Fed May Continue Lending Into Next Year*, BLOOMBERG, July 8, 2008, <http://www.bloomberg.com/apps/news?pid=20601087&sid=a0FJxCOyBjs&refer=home>.

307. Emergency Economic Stabilization Act of 2008, Pub. L. No. 110-343, 122 Stat. 3765 (codified at 12 U.S.C. §§ 5201 *et seq.*); see Dina Temple-Raston, *Bush Signs \$700 Billion Financial Bailout Bill*, NPR, Oct. 3, 2008, <http://www.npr.org/templates/story/story.php?storyId=95336601>.

308. See, e.g., Gavin Mayor, *AIG's Bailout Billions Benefit U.K. Banks*, STREET, Mar. 10, 2009, <http://www.thestreet.com/story/10469562/1/aigs-bailout-billions-benefit-uk-banks.html>.

providers of last resort” (LPOLR) to buy up securities traded on those markets.³⁰⁹ There are important problems with this approach. The first, as Professor Schwarcz acknowledges, is moral hazard—market participants will take risks that they would not absent the assurance that an LPOLR would bear them up.³¹⁰ Professor Schwarcz’s solution to this—that LPOLRs leave some ambiguity as to when they will intervene and that they buy up securities in a troubled market at a deep enough discount to ensure ultimate repayment of investments—falls through the ice for several reasons.

Market participants are likely to assume that an LPOLR will have to intervene, so “ambiguity” will have no effect. As for deep discounts, in the heat of a crisis it will be impossible to predict how much an LPOLR can recover of the purchase price of assets that investment bankers, who price assets every day, find hard to value. Moreover, a market may become too large for even a central bank to rescue. The market for credit derivatives grew in less than a decade from insignificance to a global volume of about \$20 trillion in 2006.³¹¹ Finally, even potential intervention by a central bank in a major market failure imposes significant externalities on the public in the form of enormous contingent—and unbudgeted—government liability, which will increase interest rates on Treasury obligations, and impose collateral effects such as inflation on the general economy. Therefore, while ad hoc responses of the kind seen in the current financial crisis cannot be ruled out because of the potential for catastrophic market failures such as that of 1929, the first step in preventing new crises of this kind should be regulatory reform to prevent crises from occurring.

B. The Treasury Proposals—Ideology and Incoherence

After a year’s study, the U.S. Department of the Treasury released a series of proposals for dealing with financial market failures on March 31, 2008.³¹² These included proposals for dealing with financial market problems in the near term, the medium term, and the long term. Although some of the Treasury proposals clearly have merit, such as creating a Mortgage Origination Commission to develop uniform national licensing standards for mortgage lenders,³¹³ others, dealing with securities regulation, move in the wrong direction.

309. See Schwarcz, *supra* note 23, at 8.

310. *Id.* at 8–9.

311. See Partnoy & Skeel, *supra* note 10, at 1021. By comparison, the CIA estimated the entire U.S. gross domestic product at \$14.29 trillion for 2008. See CIA—The World Factbook—United States, <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html#Econ> (last visited July 26, 2009).

312. See DEP’T OF THE TREASURY, *supra* note 258.

313. See *id.* at 6–7, 78–83.

Like earlier measures dealing with financial crises such as the savings and loan debacle of the early 1980s and the stock market crash of 1987, the Treasury proposals employ a model of institutional regulation. This model is apparent from Chapter IV of the Treasury Blueprint, which makes short-term recommendations and focuses entirely on the regulation of institutions such as banks, thrifts, and insurance companies.³¹⁴ In so doing, it overlooks the loss of transparency in the securities markets that was the primary cause of the CDO meltdown. This oversight can also be seen from its intermediate term recommendations, which would make the Federal Reserve—a central bank with no experience in regulating securities—the “lead regulatory agency” with general authority over other financial regulatory agencies, including the SEC.³¹⁵ Because unsuitability of an institutional regulatory model for dealing with securities and securities markets, and of the underlying ideological assumptions by the architects of the Treasury plan, it is at best insufficient and at worst counterproductive.

The Treasury’s intermediate-term plan proposes a merger between the SEC and the CFTC—and would have the merged commission follow the CFTC model, focusing on self-regulatory organizations (SROs), rather than on detailed rule making and enforcement.³¹⁶ This would draw most of the SEC’s regulatory teeth—including its rule-making power, its carefully devised scheme of structured disclosure, and its active enforcement program—that make it one of the most effective regulatory agencies in the federal government, despite the lapses that contributed to the CDO meltdown.³¹⁷ Instead, the merged SEC/CFTC would be merely one of many agencies under the Treasury and Federal Reserve that would join in drafting guidelines for industry self-regulation.

This approach reflects motives that have nothing to do with the CDO crisis: institutional turf-grabbing, because the Treasury’s major regulatory role consists of institutional regulation, in collaboration with the Federal Reserve; and ideology, reflecting the zeal for deregulation of the past several decades. It shows a misunderstanding of the purposes and mechanics of securities regulation that can be seen from odd statements such as its bland assertion that CRARA gave the SEC authority to “oversee” rating agencies.³¹⁸ In fact, as this Article has noted, the cause of the CDO meltdown had less to do with the regulation of financial institutions than their holding of financial instruments that could not be valued.³¹⁹

314. *See id.* at 75–86.

315. *See id.* at 105.

316. *See id.* at 106–26.

317. *See* Donaldson et al., *supra* note 15.

318. *See* DEP’T OF THE TREASURY, *supra* note 258, at 61; *supra* text accompanying note 116.

319. *See supra* text accompanying notes 152–53, 168, 297–98.

C. New Rules Proposed by the SEC

The SEC, based on authority from CRARA to deal with rating agency conflicts of interest and on a study finding such conflicts to be prevalent,³²⁰ has proposed new regulations to deal with the ratings problem at the core of the CDO debacle.³²¹ These are the best of the proposals now being considered, but fall short, largely because of the regulatory handcuffs that CRARA places on the SEC. To the extent that the proposed rules comply with CRARA, they are less than effective, and to the extent that they are effective, they are probably unenforceable under CRARA. Apart from this central problem, the SEC proposals, even to the extent that they are enforceable, rest on assumptions inconsistent with the facts underlying the CDO crisis, and, at their best, lack the force that they need.

The SEC's most important proposals are in its first release, dated June 16, 2008.³²² Here, the proposals deal directly with problems in rating asset-backed securities and their derivatives. The second and third releases, dated July 1, 2008, are designed to lessen regulatory dependence on the rating system.³²³

The most important of the SEC's proposals would require the disclosure of all information provided to an NRSRO for the formulation of a rating by issuers, depositors, underwriters, and other parties involved in issuing securities, both at initial issue and based on the rating agencies' subsequent surveillance of rated securities.³²⁴ Here the limits that CRARA imposes are clearly at work: the SEC's proposal says nothing about the nature, detail, or reliability of information that rating agencies may require from the parties dealing with them—an omission clearly based on CRARA's bar to regulations affecting the substance of credit ratings.³²⁵

The SEC proposal notes that the information would include the "loan tape," providing information on each loan such as its type, amount, loan-to-value ratio, borrower's credit score, and property location.³²⁶ This information, however, was in fact available prior to the CDO crash, and the failures of the rating system cannot be attributed solely to inadequate information, nor to conflicts of interest on the part of the rating

320. See Michael M. Grynbaum, *Study Finds Flawed Practices at Ratings Firms*, N.Y. TIMES, July 9, 2008, at C1.

321. See *Proposed Rules*, *supra* note 47, at 36,212.

322. *Id.*

323. Security Ratings, Securities Act Release No. 33-8940, Exchange Act Release No. 58071, 73 Fed. Reg. 40,106 (proposed July 1, 2008) (to be codified at 17 C.F.R. pts. 229, 230, 239, 240); References to Ratings of Nationally Recognized Statistical Rating Organizations, Investment Company Act Release No. 28327, Investment Advisor Act Release No. 2751, 73 Fed. Reg. 40,124 (proposed July 1, 2008) (to be codified at 17 C.F.R. pts. 270, 275).

324. See *Proposed Rules*, *supra* note 47, at 36,219–21.

325. See 15 U.S.C. § 78o-7(c)(2) (2006).

326. See *Proposed Rules*, *supra* note 47, at 36,220.

agencies. The loan tape information described in the SEC proposal is inadequate, because it fails to identify “liar loans,” loans with insufficient documentation, and other indicia of likely failure such as mandatory resets to substantially higher interest rates. It is noteworthy that the SEC’s requests for comments accompanying the proposed regulation ask whether it should require the disclosure of any steps taken by an NRSRO to verify information concerning assets in a pool.³²⁷ This is clearly desirable and is part of the proposals made in stronger form by this Article³²⁸—but it is also clearly forbidden by CRARA.³²⁹

The SEC pins its hopes for this provision on competitive pressures created by accreditation of new rating agencies and estimates that about thirty agencies will register under the new rules.³³⁰ It states that an agency that required less than a “standard level of information” would lose credibility for its ratings and hence would lose business to competitors.³³¹

This analysis has serious problems. First, the market for ratings has high barriers to entry,³³² and the number of registered agencies has not significantly increased since CRARA.³³³ Second, even if the new agencies contemplated by the proposals entered the market, CRARA’s bar to substantive supervision could produce an undesirable result—a “race to the bottom” in which agencies competed for business by offering high ratings based on minimal documentation. Even if the competition were less grossly invidious, it could have adverse results—agencies could, for example, compete to offer lower fees, resulting in lower staffing and less careful review of data in the formulation of ratings, particularly on new products.

The SEC’s other proposals also fall short. One describes as a conflict of interest the fact that agency analysts suggest to issuers how to structure a pool in order to win a rating and that agencies are therefore rating their own work. A proposal would therefore forbid agencies to advise issuers on how to structure a deal to win a rating.³³⁴ This does not reflect reality. Investment bankers who structure deals are fully aware of the statistical models that the agencies use to formulate ratings and “game” them to push each deal to the edge of the envelope that will qualify for a desired rating.³³⁵

327. *Id.* at 36,221.

328. *See infra* text accompanying note 375.

329. *See* 15 U.S.C. § 78o-7(c)(2) (stating that the SEC may not prescribe regulations to regulate the procedures or methodologies by which an agency determines ratings and that its rules must be “narrowly tailored” to the purposes of CRARA).

330. *See Proposed Rules, supra* note 47, at 36,237.

331. *See id.* at 36,220.

332. *See supra* text accompanying notes 200–04; *see also Rating Agencies: Measuring the Measurers*, *ECONOMIST*, June 2, 2007, at 77.

333. *See supra* text accompanying notes 200–04.

334. *See Proposed Rules, supra* note 47, at 36,226.

335. *See Lowenstein, supra* note 2, at 40.

Even the proposals implementing CRARA's requirements that the agencies fully disclose their statistical models and the accuracy of these models over time,³³⁶ are likely to be ineffective, based on the limits that CRARA places on the SEC. The absence of real competition in the rating field makes inaccuracy, particularly for ratings given well in the past, relatively meaningless. Furthermore, ratings should be moving targets: they should be adjustable as more data become available, particularly for securities which lack performance history on which to base initial ratings. The history of accuracy for any statistical model is therefore not necessarily a good indication of how accurate ratings will be, because keeping a model in place is likely to be less accurate than regularly adjusting it. It would be more helpful to require disclosure of the information used in formulating a model and the frequency of its update; but CRARA bars the SEC from requiring such disclosure.

The SEC also toys with the idea of authorizing rating agencies to issue different ratings for structured finance securities than for other securities, reflecting the fact that in practice, "investment-grade" CDOs failed more often than similarly rated conventional debt.³³⁷ The theory is that doing so would spur investors to perform their own risk analysis on asset-backed securities and their derivatives.³³⁸ In fact, this would make ratings meaningless, leaving market participants even deeper in the dark. The fact that asset-backed securities rated AAA performed less well than conventional debt with the same rating indicates a failing in the rating process, not a need for parallel rating systems. S & P states that its highest rating, AAA, indicates "extremely strong" ability to repay principal and pay interest.³³⁹ It is on this basis that asset-backed securities were incorporated into CDOs, and the latter were counted toward the capital requirements of financial institutions. What, then, would the SEC's proposed "AAA.sf" mean? Perhaps it would indicate that the rating was a work of science fiction.³⁴⁰ In any case, such ratings would make structured finance products unacceptable in meeting institutional capital requirements, and therefore unmarketable—depriving them of their basic function, which is to turn normally illiquid assets into marketable securities.³⁴¹

336. See Credit Rating Agency Reform Act of 2006 § 4, 15 U.S.C. § 78o-7(a)(1) (2006); *Proposed Rules*, *supra* note 47, at 36,251–52.

337. See *supra* text accompanying note 273.

338. See *Proposed Rules*, *supra* note 47, at 36,235–36.

339. See James J. O'Meara & David D. Tibbals, *The Role of the Rating Agencies: A Standard & Poor's Perspective*, in *THE HANDBOOK OF MORTGAGE BANKING*, *supra* note 186, at 97, 123.

340. See, e.g., A. E. VAN VOGT, *THE WORLD OF NULL-A* (1948).

341. See *supra* text accompanying note 48.

D. An Effective Response: Amending the Securities Laws to Prevent a New CDO Meltdown

What is to be done?³⁴²

Clearly, asset-backed securities and their derivatives keep rising from the grave because they are useful. Without them, there would not be enough liquidity for housing-based lending, and the liquidity offered by the secondary market for other types of securitized debt has become essential not only to the United States but also to the global economy. Even derivatives such as swap agreements have a legitimate place in matters such as hedging strategies.³⁴³ An effective response to the crisis therefore needs to preserve the advantages of the system, while dealing with the flaws that led to crisis.

Although the SEC helped to create the dependence on the rating system that contributed to the implosion of the CDO market,³⁴⁴ it is better equipped than any other regulator to take the lead in preventing similar financial upheavals in the future. The best response to the present crisis, and shield against more like it, is to adapt the securities laws to do for unconventional securities what they now do for ordinary corporate debt: assign roles in the issuance and surveillance of securities to the parties best equipped to assure that key information concerning those securities reaches the market on a timely basis. At the same time, the rules should not place undue burdens on parties that are not well equipped to bear them.

I. Why Securities Regulation Is More Effective than the Treasury Proposals

Though institutional failure played a significant role in the CDO meltdown, institutions were less important in the market failure than the assets that they held—which is why this Article describes the crisis as a CDO meltdown rather than a meltdown of commercial and investment banks. In this, the crisis resembled the bursting of bubbles that preceded it in a sequence as old as modern finance. Although part of the problem lay in lending practices and can therefore be remedied by stricter regulation of commercial lenders, the center of the problem for financial markets was the widespread distribution of securities that were either worth far less than the values at which institutions carried them on their books, or which could not be valued at all. The most effective remedy for this, therefore, lies within the sphere of securities regulation.

342. See NIKOLAI CHERNYSHEVSKY, *WHAT IS TO BE DONE?* (Michael R. Katz trans., Cornell Univ. Press 1989) (1863); V.I. LENIN, *WHAT IS TO BE DONE?* (Alexander Trachtenberg ed., Int'l Publishers 1929) (1902).

343. See generally Partnoy & Skeel, *supra* note 10.

344. See *supra* text accompanying note 54, 103–04.

2. *Fitting CDOs into a More Effective Structure of Securities Regulation*

a. Antifraud Provisions

The first modification of the securities laws required in the CDO context is to extend the already well-known antifraud provisions of the securities laws.³⁴⁵ At this time, fraud in connection with the sale of mortgages or other nonsecuritized debt obligations is subject primarily to state law. Since these sales are now largely made for the purpose of securitization, it makes sense to subject fraud in such transactions to uniform federal regulation, as it did to federalize the law of fraud in connection with the sale of securities. Ginnie Mae already protects its guaranties by requiring each issuer whose securities it guaranties to post a fidelity bond to protect against losses caused by “dishonest, fraudulent, or negligent acts” by officers, employees or other agents of the issuer, and to obtain insurance against errors and omissions by the issuer’s officers, employees, and agents.³⁴⁶ For private label issuers, the antifraud and due diligence requirements of the securities laws would substitute for these bonds.

Thus, any material misrepresentation concerning a CDO or the collateral underlying it would give rise to civil actions, both by the SEC and by private parties purchasing a CDO in reliance on it.³⁴⁷ In appropriate cases, as with other antifraud provisions of the securities laws, criminal prosecutions may be appropriate.³⁴⁸ Moreover, the sale of a debt instrument with knowledge that it would be securitized, accompanied by a material misrepresentation concerning the instrument sold, should be made a violation of the antifraud provisions of the federal securities laws. The SEC’s Enforcement Division is better organized to enforce such provisions than most states or the scattered U.S. Attorney’s offices across the country. Its experience ranges from administrative actions to litigation, and extends to international transactions, which are outside the scope of state agencies or U.S. Attorney’s offices.

Restrictions that have been imposed on the SEC’s regulatory authority in recent years need to be removed. The Gramm-Leach-Bliley Act of 1999 (GLBA),³⁴⁹ which has also been accused of contributing to the CDO meltdown by repealing section 20 of the Glass-Steagall Act³⁵⁰

345. The most famous of these provisions are the Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j(b) (2006), and SEC Rule 10b-5, 17 C.F.R. § 240.10b-5 (2008) based thereon, which forbid the use of any deceptive or manipulative practice in connection with the sale of any security. Another important antifraud provision is the Securities Act of 1933 § 17, 15 U.S.C. § 77q.

346. See U.S. DEP’T OF HOUS. & URBAN DEV., *supra* note 39, § 2-7.

347. This would expressly repeal CRARA § 4, 15 U.S.C. § 78o-7(m)(2); liability under the 1933 and 1934 Acts would be largely meaningless if persons injured by misrepresentations could not vindicate their rights by private actions.

348. See Securities Act of 1934 § 21(d), 15 U.S.C. § 78u(d).

349. Pub. L. No. 106-102, 113 Stat. 1338 (1999).

350. Banking Act of 1933, ch. 89, § 20, 48 Stat. 162 (repealed 1999).

(which established a wall between commercial and investment banking),³⁵¹ significantly restricted the SEC's regulatory powers concerning investment bank holding companies.³⁵² The GLBA, beyond its more general limitations on SEC regulatory authority, bars the SEC from regulating swap transactions except those involving actual fraud.³⁵³ These transactions, in which one party issues a guaranty of payment of CDOs held by another (and the parties thereby "swap" risk, with the guarantor assuming at least part of the risk that assets securing the CDOs will default), multiplied the risk created by CDOs by adding swap counterparties to the parties at risk. They thus contributed to the CDO meltdown. This section of the GLBA should therefore be repealed, and the SEC should be authorized to regulate swap agreements by rule-making as well as by investigating actual fraud. The GLBA's general principle of encouraging SEC coordination with other regulatory agencies³⁵⁴ should be continued, and the SEC should collaborate with other agencies such as the CFTC³⁵⁵ in drafting regulations concerning swaps and other synthetic transactions based on securities.

The restrictions that CRARA imposes on the SEC also need repeal.³⁵⁶ The SEC should be able to draft regulations governing the rating process for asset-backed securities and their derivatives, though it will need to work with a board of independent professionals in setting standards for rating exotic securities, in much the same way as Sarbanes-Oxley established a Public Accounting Oversight Board to oversee the audit process in financial reporting by public corporations.³⁵⁷

351. See Robert Kuttner, *The Bubble Economy*, AM. PROSPECT, Oct. 2007, at 20, 22.

352. See Gramm-Leach-Bliley Act of 1999 § 231, 15 U.S.C. § 78q(i), (j).

353. 15 U.S.C. § 77b-1. The GLBA not only bars the SEC from requiring or even recommending registration of swap agreements, but it even bars it from promulgating rules affecting security-based swap agreements. This illustrates the often suspected principle that the securities laws do not bar manipulative or deceptive practices with respect to Congress. See also *Caiola v. Citibank, N.A.*, N.Y., 295 F.3d 312, 324-27 (2d Cir. 2002) (finding synthetic option transactions to be securities, distinguishing them from "swaps" and declining to retroactively apply the GLBA swap exclusion). The one significant exception to swap regulation by the SEC permits actions under section 10(b) of the Securities Exchange Act of 1934 for fraudulent or manipulative practices, including insider trading. Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j(b). The restrictive scope of this exception is illustrated by the bar imposed by the GLBA upon the SEC taking action under section 17 of the 1933 Act. Securities Act of 1933 § 17, 15 U.S.C. § 77q(d). It is hard to explain this inconsistency, although one can surmise that the lobbyists pushing this legislation and the Congresscritters enjoying their largesse mistakenly believed that the stringent pleading requirements required of private plaintiffs for 10b-5 actions also applied to the SEC. The fact that the SEC, despite the GLBA, retains power to deal with fraudulent swap transactions, is illustrated by its investigation of AIG for allegedly overstating the value of subprime CDOs that were used as the basis for swap agreements. See *TheStreet.com, AIG Draws Fresh SEC Scrutiny* (June 6, 2008), <http://www.thestreet.com/print/story/10420143.html>.

354. See Gramm-Leach-Bliley Act § 220, 15 U.S.C. § 80b-10; *id.* § 241, 15 U.S.C. § 78m.

355. The CFTC regulates futures contracts, even in securities, and the two agencies cooperate in regulating transactions that combine features of securities and futures contracts.

356. See *supra* text accompanying note 116.

357. See Sarbanes-Oxley Act §§ 101-109, 15 U.S.C. §§ 7211-7219. The supervision of auditors is a particularly good model both because it responded to conflicts of interest and the absence of competition in the auditing profession, and because ratings, as much as audited financial statements, convey information on securities to the general markets.

b. Setting Standards for the Rating Agencies

The antifraud provisions of the securities laws will not, by themselves, suffice to deal with the problem. As noted above,³⁵⁸ rating agencies play a critical role in the issue of CDOs—far more important than in the issuance of conventional securities³⁵⁹—and their payment by issuers places them in a conflicted position.³⁶⁰ The 1933 Act deals with such conflicts on the part of traditional actors in the issuance of securities by making them responsible for complete and accurate information concerning securities as part of the registration process.³⁶¹ This responsibility extends not only to corporate officials but to potentially conflicted professionals such as auditors, attorneys, and, perhaps most important, underwriters of securities.³⁶² Their responsibility is enforced by making them liable to persons who buy securities in reliance on such information, unless they can show that any material inaccuracies or omissions occurred despite their due diligence.³⁶³ This is intended to place auditors and underwriters in a quasi-adversarial posture vis-à-vis issuers, by motivating them to insure that issuers provide complete and accurate information in the filings that they make with the SEC in connection with issuance of securities.

Because a rating is an essential component of the sale of a CDO, the rating agencies occupy a position similar to accountants and underwriters, in that their work product conveys important information on the CDO to its purchasers. To date, this role has not been regulated, but the responsibilities placed upon professionals and underwriters by the 1933 Act suggest that the rating agencies should also have to meet an appropriate due diligence standard, at least with regard to ratings that issuers

358. See *supra* Part I.C.

359. Claire Hill, *supra* note 97, at 90–94, concluded that the only regulatory reform needed for the rating agencies was to break the Moody's-S & P duopoly by making it easier for competing agencies to qualify as NRSROs with the SEC, a step that was taken by CRARA in 2006. See *supra* text accompanying note 147. Her analysis, however, was based on the agencies' failure to issue timely downgrades on conventional corporate debt in cases such as the Enron bankruptcy. It failed to take into account the special role played by ratings in asset-backed securities and other CDOs, and of course appeared in print before the CDO meltdown spotlighted the special problems posed by such unconventional instruments.

360. A proposed arrangement that the rating agencies are considering, in response to an investigation of their alleged conflicts of interest, with New York State's Attorney General, Andrew Cuomo, would not suffice. Under this arrangement, the agencies would charge fees for each analytical process that they employed in reaching a final rating, rather than simply being paid at the conclusion of the rating process, as per present practice. See Jenny Anderson & Vikas Bajaj, *Rating Firms Seem Near Legal Deal on Reforms*, N.Y. TIMES, June 4, 2008, at C1. This arrangement would not eliminate the underlying conflict, as the agencies would still be paid by the issuers whose securities they rate, nor would it subject them to liability for failure to engage in due diligence in the rating process, as this Article proposes.

361. Securities Act of 1933 § 11, 15 U.S.C. § 77k.

362. *Id.*

363. *Id.*

pay them to provide as part of the initial issuance of structured finance securities.³⁶⁴

It therefore makes sense to subject the rating agencies to regulation beyond that imposed by CRARA and to give the SEC a leading role in drafting and enforcing regulations for this purpose. In so doing, it should consult with an independent body comparable to the Public Company Accounting Oversight Board, established by the Sarbanes-Oxley Act of 2002.³⁶⁵ This body would include representatives of the rating agencies themselves, the SEC, the Federal Reserve, and other government regulatory agencies making use of the rating process, along with representatives of the legal and auditing professions, and professional economists. Its functions would include evaluating the effectiveness of statistical models used by the rating agencies, assuring that the agencies update the models frequently based on experience and macroeconomic conditions, and assuring that the agencies properly apply the models, both in the initial issuance of securities and in the periodic review of their ratings.

The most important ratings are those for the asset-backed securities that serve as the foundation for more complex CDOs, including synthetic instruments as well as those based directly on cash flow from underlying financial assets. The basic element of risk lies at this level—the risk of default by obligors on mortgages or other debt instruments. The risk involved goes beyond lending to persons with questionable credit histories or with no equity in the property securing their loans; it extends to the risk, prominently featured in the current CDO meltdown, that there is no documentation of debtors' ability to make continuing payments on their loans.

Though rating models should generally vary over time, some baseline standards should be established by statute or formal regulation as building blocks for more elaborate guidelines to be formulated by the supervisory board. It is reasonable to require that for an asset-backed security to receive a top rating, it should meet certain minimal standards. First, no asset-backed security should be eligible to receive a rating unless all the obligations backing it are fully documented. At a minimum, such documentation should include a credit history and income verification for the debtor on each underlying obligation; a copy of the note creating the obligation; appraisal and title insurance for real property securing an obligation; certification of the proper recording of a mortgage, certificate of title (chiefly for automobile loans), or other perfection of security interests in collateral.

Secondly, an investment-grade rating should require geographical diversification: a pool of assets would have to include loans drawn from a minimum number of locations across the country, to avoid the risk of

364. See, e.g., 77 CONG. REC. 2912 (1933) (demonstrating that misrepresentations by underwriters were considered by the House of Representatives in the remedial provisions of the 1933 Act).

365. Sarbanes-Oxley Act §§ 101–109, 15 U.S.C. §§ 7211–7219.

business downturn in any particular area.³⁶⁶ This is even more important for mortgages than other forms of collateral, where mortgaged property should be from diverse locations even within a municipality (as a foreclosure will lower the value of surrounding homes and thereby increase the probability of other foreclosures); the oversight board should examine the degree of geographical dispersion required for investment-grade ratings for each type of collateral.

A third standard would focus on quality of the collateral: a pool would need to have a certain minimum percentage of assets meeting minimum standards concerning credit risk. These standards should be devised with the experience of the recent market failure in mind. Ginnie Mae standards would be useful but not conclusive.³⁶⁷ Even federal standards became too lax by the time of the crisis: the FHA noted, for example, that the rate of defaults had become “disproportionately high” to the point that its insurance fund was jeopardized.³⁶⁸ A key element cited by Neil Baron,³⁶⁹ which seems on point for the failure of GSE mortgages, was the erosion of down payment requirements. Some appropriate minimum percentage of the value of each house (or each car, if car loans are being securitized) should represent a down payment, not derived from commercial borrowing.³⁷⁰ As with junk bonds,³⁷¹ a diversified portfolio of loans, each of which has a nontrivial chance of repayment, may make a good investment, but it makes no sense to include loans with virtually no chance of repayment. Therefore, baseline should also bar investment-grade ratings for any pool including mortgages with mandatory refinancing built in.

As noted above, a minimum down payment is evidence that a mortgagor has the financial capability to make payments on a mortgage and gives the mortgagor an incentive not to simply walk away from a home when faced payments become more difficult. Secondly, it assures the mortgage holder a greater recovery if the house must be sold in foreclosure. Finally, as noted above,³⁷² a fixed percentage of equity will require a larger down payment in a rising market, so it will serve to restrain real

366. Early on, the SEC recognized geographic diversification of loans as an important advantage of the securitization process. An investor could avoid the risk of downturn in one area by buying a portfolio of asset-backed securities representing loans in diverse locations. *See* SEC REPORT, *supra* note 61, at 16–17.

367. Ginnie Mae has promulgated detailed requirements to qualify for its guaranties. These standards apply both to originators of Ginnie Mae-guaranteed certificates and to loans being packaged to collateralize securities backed by Ginnie Mae guaranties. *See* U.S. DEP'T OF HOUS. & URBAN DEV., *supra* note 39, §§ 2, 9.

368. *See* Standards for Mortgagor's Investment in Mortgaged Property: Additional Public Comment Period, 73 Fed. Reg. 33,941, 33,942 (proposed June 10, 2008) (to be codified at 24 C.F.R. pt. 203).

369. *See* Baron, *supra* note 73, at 85.

370. Borrowing from family members, at least to some extent, should be acceptable, because a mortgagor will be almost as unlikely to walk away from a house in which family members have been invested as from his or her own funds.

371. *See supra* text accompanying note 162.

372. *See supra* text accompanying note 256.

estate “bubbles”—i.e., rapid increases not based on economic fundamentals—and will require greater financial capability from home buyers as home prices in a given area rise.

The standards would not need to match those established for mortgages guaranteed by Ginnie Mae; it makes sense to allow secondary mortgage market pools that include mortgages that are riskier than Ginnie Mae allows but still enjoy a reasonable chance of repayment. The standards would, however, apply to publicly held GSEs as well as to private label securities.

Although mortgage debt should be permitted to exceed the maximum required by Ginnie Mae (the so-called jumbo mortgages)—which would reduce the cost of financing in areas such as Manhattan or Los Angeles where residence prices normally exceed Ginnie Mae maximums—appropriate safeguards should be set in place for these mortgages, such as minimum nonfinanced percentages of equity investment by mortgagors and appropriate ratios between mortgagors’ income and the amount of the mortgage loans. Other types of debt instruments could apply analogous principles.

The SEC should also promulgate disclosure standards for rating agencies exceeding those permitted by CRARA. Agencies would be required to disclose the statistical models used to rate securities, the data on which the models were based, the frequency with which the models were updated, and how they were applied to the data concerning a pool of assets being securitized. Agencies would also have to disclose updates of the models, the rationale for the updates, and how they applied to securities already rated.

c. Enforcing the Standards

The antifraud provisions proposed above speak for themselves: SEC enforcement activity and the potential for private actions should deter outright fraud not only in the sale of asset-backed securities, but with regard to debt instruments sold with intent to securitize them.³⁷³ Moreover, the baseline documentation requirements should help to prevent future excesses such as the “liar” loans that contributed to the present crisis: the prohibition on giving a rating to a pool of assets containing undocumented loans should deter making such loans, since there will be no ready market for them.

That leaves a key part of the problem in place: the fact that, given the opacity of CDO structure and the velocity with which asset-backed securities and CDOs based on them are traded, the ratings placed upon them by rating agencies have acted as a surrogate for due diligence concerning the strength of a particular security. To deal effectively with this,

373. See *supra* Part III.D.2.a.

the rating agencies must be assigned rights and liabilities in the issuance process, just as the original 1933 Act brought underwriters into the process to deal, *inter alia*, with their conflicts of interest as distributors of securities to the unsuspecting public.³⁷⁴

Rating agencies are too small and rate too many securities to require them to verify the documentation of every mortgage in a pool being rated.³⁷⁵ This problem can be addressed by making due diligence in the rating process a two-step matter. The issuers, auditors, and underwriters should be responsible for due diligence in providing complete and accurate information concerning mortgages or other debt in a pool to the rating agencies. The latter should be held to a due diligence standard requiring them to examine the work product of issuers and auditors for each issue of asset-backed securities and to reasonably apply fully disclosed statistical models for assets of the type being securitized to the data before them in formulating their ratings.

Roger Lowenstein, describing an asset-backed security based on 2393 subprime loans, noted that Moody's, in rating the issue, examined none of the underlying loans.³⁷⁶ Someone needs to do just that before a rating can be issued. Under this proposal, officers of the originator and the SPV, professionals and underwriters examining its assets, and the rating agencies rating asset-backed securities in reliance on the information furnished them would be liable to investors—like the CEO and CFO of an issuer of traditional securities.³⁷⁷ Liability under the 1933 Act would thus take the place of the errors and omissions insurance that Ginnie Mae requires of the issuers it insures.³⁷⁸

Normally, this kind of liability for failure to conduct diligence runs to persons buying securities based on misinformation.³⁷⁹ In the case of CDOs, however, failure to act with due diligence should add another form of liability to make responsible parties pay attention. In the CDO crisis, the Federal Reserve and other government agencies or government sponsored enterprises have bought up otherwise unmarketable CDOs to prevent market chaos. Though this option should remain open to keep larger markets from failure, a participant in the issuance process whose failure to conduct due diligence has resulted in radioactive instruments that have been sold to a liquidity provider of last resort should be liable for any losses incurred by the LPOLR on such purchases.

374. See Securities Act of 1933 § 11(a)(5), (b)(3), 15 U.S.C. § 77k(a)(5), (b)(3) (2006) (making underwriters liable for misleading statements or omissions in registration statements for securities absent proof that they used due diligence to assure that no such statements or omissions were made).

375. See Partnoy, *supra* note 98, at 640 (stating that in 1995, Moody's had 560 analysts, but rated 20,000 issuers in the United States and 1200 issuers outside the United States).

376. See Lowenstein, *supra* note 2, at 38.

377. See 1933 Act § 11(b), 15 U.S.C. § 77k(b).

378. See U.S. DEP'T OF HOUS. & URBAN DEV., *supra* note 39, § 2-7.

379. See 15 U.S.C. § 77k(a) (stating that liability runs to persons buying securities based on misleading statement or omission in initial registration statement).

IV. THE FUTURE: DEALING WITH NEW TYPES OF SECURITIES AND MARKET CRISES

When Solomon wrote that there is nothing new under the sun,³⁸⁰ he evidently was not thinking of investment bankers and their works. New financial products have appeared in a steady stream since the Middle Ages, and one can be sure that, with computer assisted models and globalization, more will follow. With them will come market bubbles that will burst, to the surprise of people who should know better, and cause general havoc. Should we anticipate how to deal with products now lurking only in children's nightmares, or simply conclude that "[s]ufficient unto the day is the evil thereof"?³⁸¹

Though it is obviously impossible to anticipate every new type of security and its potential for creating havoc on world markets, this Article suggests that it is prudent to deal with new securities as they enter the market bestiary.³⁸² A basic step should be to require issuers applying to register new types of securities to identify them as such in their 1933 Act disclosure. The disclosure would describe them in detail and enumerate the ways in which they differ from existing securities. The descriptions, which would be on highly structured forms designed by the SEC for the purpose, would carefully enumerate the risks inherent in the new structures, including economic models if their yield and/or risk is based upon such models.

The rating agencies would then have the responsibility of deciding whether, based on existing information including tested prior models, a rating could be issued. They would be barred from issuing ratings at the top two levels unless they could conclude, based on analysis satisfactory to the proposed oversight board, that the new securities were close enough in nature to existing types of securities with established track records that the models sufficed to justify the ratings. Otherwise, new types of securities would be ineligible for purchase by LPOLRs and would have to take a "haircut"—a reduction in assumed value to be determined by the governing board—if included as collateral backing CDOs.

V. CONCLUSION

Despite the treatment of the current financial crisis by the Treasury and Federal Reserve as a problem with financial institutions, it is, at bottom, a problem in securities regulation. It originates with the development of securities—asset-backed securities and their derivatives, pack-

380. *Ecclesiastes* 1:9 (King James).

381. *Matthew* 6:34 (King James).

382. An example that readily comes to mind is an asset-backed security based on carbon offset credits.

aged into CDOs—that became so complex that investors could not rely on securities law disclosure concerning their payment characteristics. This void was filled by the rating system, although the latter was largely outside the scope of securities regulation. The result was that securities were bought, sold, and used as the basis for derivative agreements solely on the strength of ratings that, as the housing bubble swelled, became progressively further removed from reality.

To deal with this problem, then, an effective approach must bring the rating agencies into the process of securities issuance much as underwriters were with the 1933 Act. To make a due diligence requirement for the agencies realistic, it should have two phases: professionals employed by issuers and underwriters should provide complete, verified data on underlying obligations to the agencies, who would document the statistical models they apply to the data and their application. At the same time, some abuses of the last market cycle should be curbed by appropriate provisions in the securities laws: misrepresentations by persons selling assets into a securitization would be barred by the securities laws, and certain baseline requirements should be established for any asset-backed securities, including a bar on the inclusion of undocumented loans in any pool being securitized.

Finally, an expert board should be established comparable to the Public Company Accounting Oversight Board. This board would oversee the rating process, including the appropriateness of the statistical models applied by rating agencies in rating securities, and would also review proposed models used for new types of securities. The work of this board would have considerable importance in assuring that a AAA rating for a CDO provides the same strong assurance of payment as a AAA rating for a traditional corporate debt instrument.

