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The Great Collapse: How Securitization Caused the Subprime Meltdown

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This Article argues that one of the primary causes of the subprime meltdown and the resulting economic collapse was the structure of securitization as applied to subprime and other non-prime residential loans, along with the resecuritization of the resulting mortgage-backed Securitization weakened underwriting by discouraging securities. originators from gathering "soft information" about the likelihood of borrower default and instead caused loan originators and other market participants to focus almost exclusively on such "hard information" as FICO scores and loan to value ratios. At each stage of the loan and securitization process, securitization encouraged market participants to push risk to the very edge of what the applicable market standards would tolerate, to make the largest, riskiest loans that could be sold on Wall Street, to bundle them using the fewest credit enhancements rating agencies would permit, and then to repeat the securitization process with many of the lower-rated mortgage-backed securities that resulted. Loan originators could profit by bargaining down the due diligence of other market participants and so reduce their own underwriting standards. Securitization also created a business model for subprime lenders whereby they could "profitably fail." Thinly capitalized subprime lenders could generate large numbers of loans likely to default, along with substantial profits for the executives who directed them, and then simply exit the market when they predictably lost their access to the securitization pipeline.

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The Great Collapse: How Securitization Caused the Subprime Meltdown

KURT EGGERT*

I. INTRODUCTION

The economies of the United States and many of the world's countries have been shaken by perhaps the greatest financial crisis since the Great Depression. This crisis was triggered by the subprime meltdown that started in late 2006, when early subprime loan defaults increased dramatically and then subprime lenders began going out of business rather than buying back problem loans. It spread as hedge funds went under, investors stopped purchasing securities backed by subprime loans, and financial institutions stopped trusting each other, leading to a massive credit crunch.

The subprime meltdown, in turn, was caused in large part by the financial mechanism that had caused it to surge since the late 1990s, securitization. Through securitization, subprime lenders could make loans and sell them on Wall Street, where investment houses marketed securities backed by pools of subprime loans. In this way, subprime lenders could quickly unload much of the risk of the subprime loans as well as recoup the money lent and relend it to new subprime borrowers.

Investors in securities backed by subprime securities should have known that these loans were risky and that the subprime market was rife with abusive lending practices. Reports of predatory lending were widespread and even large subprime lenders had been forced to pay large fines for their lending practices. However, investors were lulled into a false sense of security by the understanding that, however much subprime lenders might be overcharging or otherwise taking advantage of borrowers, the investors were largely protected from liability for this abusive behavior and were even the beneficiaries of it through the higher rates charged to borrowers. Ironically, the investors that poured money into the subprime market seemed not to realize that securitization allowed the subprime

^{*} Professor of Law at Chapman University School of Law. The Author would like to thank the members of the *Connecticut Law Review* for their symposium on the subprime crisis, at which an early version of this paper was presented, and their helpful editing. Thanks go as well to Patricia McCoy, Alan White, Lauren Willis, Daniel Bogart, Timothy Canova, Steven Schwarcz, Kathleen Engel, and Kathleen Keest, for comments on the paper or allowing me to pick their brains on these issues. Thanks also, as always, to Clare Pastore for her tenacious editing and support. Any errors, of course, are my own.

originators to take advantage of borrower and investor alike.

Securitization received a significant stress test, and not only failed miserably, but also helped drag down much of the world's economy with its failure. The current recession is, to a surprising extent, caused by the effects of securitization itself. While other factors also played a role in the meltdown, subprime securitization may represent one of the greatest structurally-caused financial implosions of the modern world. In essence, subprime securitization acted like a virus that infected the entire American financial industry and affected much of the world. And just as an outbreak of a disease created in a laboratory would warn against careless genetic engineering, the subprime crisis and the recent financial crash should warn against the dangers of careless financial engineering. While securitization can be useful in some areas, market participants should be aware and wary of its flaws.

II. THE COLLAPSE

Defaults and foreclosures have surged in the United States, especially among subprime loans. More than twenty percent of all subprime loans are seriously delinquent, as are one in ten securitized near-prime loans.¹ A record rate of eleven percent of all loans are currently at least one payment past due.² Credit Suisse predicts that an astounding 8.1 million homes in the United States will likely be foreclosed on in the next four years.³ With the decrease in available credit, housing prices have plummeted and homeowners lost an estimated \$3.3 trillion in equity in 2008.⁴ The Standard & Poors/Case-Shiller National Index has fallen more than twenty percent from its high, amid predictions that it may fall another fifteen percent.⁵ With this drop in housing value, an estimated fifteen to twenty

¹ Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Res. Sys., Housing, Mortgage Markets, and Foreclosures, Speech at the Federal Reserve System Conference on Housing and Mortgage Markets (Dec. 4, 2008), http://www.federalreserve.gov/newsevents/speech/bernanke2008 1204a.htm.

² Mortgage Bankers Association, *Delinquencies Continue to Climb in Latest MBA National Delinquency Survey*, Mar. 5, 2009, *available at* http://www.mortgagebankers.org/NewsandMedia/PressCenter/68008.htm.

³ CREDIT SUISSE, FORECLOSURE UPDATE: OVER 8 MILLION FORECLOSURES EXPECTED (2008), http://www.nhc.org/Credit%20Suisse%20Update%2004%20Dec%2008.doc (last visited Feb. 16, 2008); Press Release, SmartBrief.com, Data: Mortgage 'Foreclosure Prevention' Fixes Failing to Work, U.S. Home Foreclosure Toll Now Expected to Rise Even Higher to Eight Million (Dec. 18, 2008), http://www.smartbrief.com/news/aaaa/industryPR-detail.jsp?id=F25D6EC9-C81F-4194-8EA8-C9A7228C10EB.

⁴ Mortgage Lending Reform: A Comprehensive Review of the American Mortgage System: Hearings Before the Subcomm. on Financial Institutions and Consumer Credit of the H. Comm. on Financial Services, 111th Cong. 2 (2009) [hereinafter Hearings Mortgage Lending Reform] (testimony of David Berenbaum, Executive Vice President of the National Community Reinvestment Coalition).

⁵ Kelvin Tay, On the Lookout for the Onset of Economic Recovery, BUS. TIMES SING., Jan. 21, 2009, available at LEXIS, News Library, BUSTMS File; Randall S. Kroszner, Governor, Bd. of Governors of the Fed. Res. Sys., Improving the Infrastructure for Non-Agency Mortgage-Backed

percent of homeowners with mortgages owe more on their houses than the houses are worth.⁶ The decline in housing prices appears still to be continuing, if not accelerating as of early 2009. In January, 2009, the Standard & Poors/Case-Shiller index of 20 metropolitan areas had fallen 19% from the year before, a new record drop for that index, edging out the previous record from the month before.⁷ Home prices in the hardest hit metropolitan markets have declined by almost fifty percent.⁸ Housing prices have fallen so greatly that some noteholders are walking away from houses after foreclosing, preferring to avoid the costs of holding and attempting to sell the homes.⁹

Increasing subprime mortgage defaults and plummeting housing prices have caused enormous losses for many financial institutions and shaken the confidence of many investors in the credit markets generally.¹⁰ Investors watched AAA-rated subprime securities be downgraded over and over, some ultimately ending up with junk ratings.¹¹ With investors refusing to purchase securities backed by subprime loans, and purchasers of subprime loans demanding that the loan originators buy them back, subprime lenders have by and large exited the market. Nearly 150 mortgage lenders of all types that employed over fifty people (and hundreds more smaller firms) failed or went out of business in 2007 alone.¹² The subprime industry collapsed, falling from an estimated 33.6% of mortgage production in 2006 to 2.8% by the fourth quarter of 2008.¹³

Subprime and related mortgage risk dragged down one large financial institution after another, with Lehman Brothers and Washington Mutual bankrupt, insurer AIG bailed out, and Fannie Mae and Freddie Mac taken

Securities, Speech at the Federal Reserve System Conference on Housing and Mortgage Markets (Dec. 4, 2008), http://www.federalreserve.gov/newsevents/speech/kroszner20081204a.htm.

 ⁶ Bernanke, *supra* note 1. Mortgages of this kind are often referred to as being "under water." *Id.* ⁷ David Streitfeld, *Home Prices in Jan. Fell by a Record Amount*, N.Y. TIMES, Apr. 1, 2009, at

B3, *available at* LEXIS, News Library, NYT File. ⁸ *Id*.

⁹ Susan Saulny, *In Foreclosure Crisis, a Rise in Banks Walking Away*, N.Y. TIMES, Mar. 30, 2009, at A2, *available at* LEXIS, News Library, NYT File.

¹⁰ Turmoil in US Credit Markets: Recent Actions Regarding Government Sponsored Entities, Investment Banks and Other Financial Institutions: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs, 110th Cong. (2008), available at http://banking.senate.gov/public/_ files/BERNANKEStatement092308_SenateBankingCommittee.pdf (statement of Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Res. Sys.); Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Res. Sys., The Crisis and the Policy Response, Speech at the Stamp Lecture, London School of Economics (Jan. 13, 2009), http://www.federalreserve.gov/newsevents/speech/bernanke20090113a. htm.

¹¹ Gretchen Morgenson, *Debt Watchdogs: Tamed or Caught Napping?*, N.Y. TIMES, Dec. 7, 2008, at A1, *available at* LEXIS, News Library, NYT File.

¹² Press Release, MortgageDaily.com, Nearly 150 Mortgage Operations Collapse in 2007 (Jan. 22, 2008), http://www.mortgagedaily.com/PressRelease012208.asp.

¹³ Hearings Mortgage Lending Reform, supra note 4, at 2 (testimony of Julia Gordon, Center for Responsible Lending) (citing Inside B&C Lending) (Feb. 27, 2009), http://www.imfpubs.com/imfpubs_ibcl/about.html).

over by the government.¹⁴ Private-label securitization, done without the participation of government-sponsored entities (GSEs) like Fannie Mae and Freddie Mac, has virtually been shut down.¹⁵ Lending between financial institutions such as banks for terms longer than a few days by and large ceased in September and October of 2008.¹⁶ In October 2008, there was a real possibility of an international financial collapse.¹⁷ Surviving banks and other financial institutions received an offer of \$250 billion in bailouts in late 2008 and have pleaded for more.¹⁸

Inevitably, as in most post mortems, fingers will be pointed in many directions, from the "originate-to-distribute" model of subprime origination, whereby lenders quickly offload much of the risk of default, to the greed that seems to have run rampant on Wall Street, to the lack of regulation over subprime lenders. Some have blamed Fannie Mae and Freddie Mac for excessive involvement in the subprime market, others for not participating in and influencing subprime enough. This Article. however, focuses on one causative aspect: how a prime element of the subprime meltdown is the flawed structure of securitization itself and how, because of the securitization of subprime and other non-prime mortgages, as well as the resecuritization of some of the resulting subprime-backed securities, many of the villains of the story were acting based on incentives generated by that structure. While there were multiple causes of the subprime boom and collapse, securitization itself was a significant cause of both.

Specifically, this Article argues that securitization turned a significant portion of subprime and near-prime lending over to a new business model for lending. The securitization model of subprime lending consists of companies designed to ramp up quickly during boom years, make as much money as possible for the owners or top executives of the company, then as

¹⁴ Souphala Chomsisengphet et al., Product Innovation & Mortgage Selection in the Subprime Era (Oct. 23, 2008) (unpublished working paper), *available at* http://ssrn.com/abstract=1288726.

¹⁵ Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Res. Sys., The Future of Mortgage Finance in the United States, Speech at the UC Berkeley/UCLA Symposium: The Mortgage Meltdown, the Economy, and Public Policy (Oct. 31, 2008), http://www.federalreserve.gov/newsevents/speech/bernanke20081031a.htm.

¹⁶ Financial and Economic Challenges Facing Small Businesses: Hearing Before the H. Comm. on Small Business, 110th Cong. 39 (2008), available at http://clerk.house.gov/library/referencefiles/110_sma_066.pdf [hereinafter Small Business Hearing] (statement of Randall S. Kroszner, Governor, Bd. of Governors of the Fed. Res. Sys.).

¹⁷ Priorities for the Next Administration: Use of TARP Funds Under EESA: Hearing Before the H. Comm. on Fin. Servs., 111th Cong. (2009), available at http://www.house.gov/apps/list/hearing/financialsvcs_dem/kohn011309.pdf (statement of Donald L. Kohn, Vice Chairman, Bd. of Governors of the Fed. Res. Sys.).

¹⁸ Oversight of Implementation of the Emergency Economic Stabilization Act of 2008 and of Government Lending and Insurance Facilities; Impact on Economy and Credit Availability: Hearing Before the H. Comm. on Fin. Servs., 110th Cong. (2008), available at http://financialservices. house.gov/hearing110/bernanke111808.pdf (statement of Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Res. Sys.).

necessary, go out of business, leaving billions of dollars of bad loans in their wake. These lenders established the culture and business methods of the subprime market. A central element of the subprime lending model in the age of securitization is that many subprime lenders were designed so that they could profitably fail, at least profitably for the individuals who operated the subprime lending institutions.

Worse yet, securitization gave not only an incentive but also a means for subprime lenders to bargain down the standards of much of the financial industry of the United States. Securitization took what had been a single financial institution—a lender that made and underwrote its own loans and held them until they matured-and "atomized" it into its constituent parts.¹⁹ As Michael Jacobides, noted, "The mortgage banking industry is one of the most fascinating examples of vertical disintegration and reconfiguration in modern business history."²⁰ By splitting the work of lenders among numerous entities, it allowed the subprime originator to bargain with the other entities in the securitization chain to downgrade the other entities' efforts to maintain loan quality. Furthermore, because so many actors in the securitization process were paid based on quantity rather than quality of loans, they were often willing participants in handling lower and lower quality loans. This corruption of the entire securitization process allowed originators and their Wall Street enablers to drive down loan quality, securitize the resulting risky loans, and sell the mortgage-backed securities to investors.

These difficulties can spring up in the securitization of many types of assets, and the current economic crisis did not spring solely from subprime loans. As Federal Reserve Board Chairman Bernanke noted, "the boom in subprime mortgage lending was only a part of a much broader credit boom characterized by an underpricing of risk, excessive leverage, and the creation of complex and opaque financial instruments that proved fragile under stress."²¹ This Article, however, focuses on the securitization of subprime loans, where securitization's fragility and instability have been most apparent and its effects most damaging. Securitization is no doubt useful and workable in many contexts. However, its weaknesses have to be understood, and the securitization of subprime loans is the best Petri dish in which to study the structural flaws of securitization.

The destabilizing effect of securitization appears both at the beginning of its process and at its end, in both the origination of the asset to be securitized and at the resolution of problems that occur during the life of the securitized asset. Securitization not only weakens loan underwriting,

¹⁹ Michael G. Jacobides, *Mortgage Banking Unbundling: Structure, Automation and Profit*, MORTGAGE BANKING, Jan. 1, 2001, at 28.

²⁰ Id.

²¹ Bernanke, *supra* note 10.

but, as has been discussed elsewhere, it also makes it more difficult for the poorly underwritten loans that do go into default to be worked out, and for borrowers to avoid foreclosure by obtaining a loan modification.²²

Securitization also amplifies the effects of the defaults that it causes. The effect of subprime defaults was magnified by the effect of downgrading investment-grade securities. If more loans than expected in a lender's portfolio of loans go into default, the lender might easily deal with the resulting loss. However, a similar unexpected increase in defaults in a pool of securitized loans can have a cascading effect. A sufficiently large number of unexpected defaults would cause the entire basket of securities to be downgraded, including the highest rated, investment grade securities. If investment grade securities are downgraded to below investment grade, this downgrade can cause losses to some institutions that own them far in excess of the credit loss. Some financial institutions or insurance companies have the requirement of holding investment grade securities "hard coded" into them through regulation or agreements. If they hold too many downgraded securities, they could be considered "troubled," and might have to raise significant additional capital, and may have their liquidity and counterparty status affected.²³

III. SECURITIZATION AND THE SUBPRIME MARKET

Securitizing subprime and other non-prime loans damaged the process of underwriting those loans by fundamentally changing the way lenders viewed underwriting. Instead of viewing underwriting as a tool to protect lenders against losses, lenders that securitized their loans viewed it as a hurdle to clear in order to sell the loan. Instead of being welcomed as the lender's protector, the underwriting department was too often considered the "Department of Production Reduction."²⁴

At the heart of the subprime crisis is the increasing number of subprime and other non-prime loans that went and are going into default, often before the first payment. Had these loans been held by their originators, the effect of a large and unexpected increase in defaults would have been limited. The subprime originators would face severe financial hardship. Many, if not most, would go out of business, and this result

²² See Kurt Eggert, Comment on Michael A. Stegman et al.'s Preventive Servicing Is Good for Business and Affordable Homeownership Policy: What Prevents Loan Modifications?, 18 HOUSING POL'Y DEBATE 279, 285–86 (2007) [hereinafter Eggert, Comment] (noting "several barriers to effective preventive servicing and its attendant loan modifications"); see also Kurt Eggert, Held Up in Due Course: Predatory Lending, Securitization, and the Holder in Due Course Doctrine, 35 CREIGHTON L. REV. 503 (2002), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=904661 [herinafter Eggert, Held Up in Due Course].

²³ Hearings Before the H. Comm. on Financial Services, 111th Cong. (2009), available at http://www.house.gov/apps/list/hearing/financialsvcs_dem/berg032509.pdf (testimony of Richard S. Berg, CEO of Performance Trust Capital Partners, LLC).

²⁴ Kevin Coop, *Has Change Arrived?*, MORTGAGE BANKING, Mar. 1, 2009, at 93.

would purge the market of many subprime loan originators that made excessively risky loans. Thus, the pain and damage of the subprime meltdown would largely have been contained to the subprime market.

However, through the wonders of securitization, the interests in the defaulting loans had been sliced and diced, tranched and sold, then often resecuritized, retranched and resold, perhaps several times over. The risk of default was no longer concentrated in the lenders responsible for the loans, but instead was distributed in a complex and opaque way throughout the financial industry and among a multitude of investors, some completely unaware that their investments ultimately depended on the stability of the subprime market.

Rather than causing a world-wide financial crisis, securitization was supposed to make mortgage lending more profitable by providing lenders with broader sources of funding than the deposits obtained by banks, and by allowing them to offload their exposure to risks such as interest rate changes, prepayment, defaults and foreclosures, thus reducing the cost to lend.²⁵ For years, many commentators had praised the efficacy of securitization and its benefits for the mortgage industry.²⁶

Securitization allowed investors from throughout the world to invest in real estate in the United States through the purchase of securities backed by American residential mortgages. At least partially as a result of the funds pouring into the American mortgage market, prices for American homes boomed, with average home prices increasing from about \$150,000 in 1997 to more than \$250,000 in 2005.²⁷ The profits of the financial services industry also ballooned before the recent crash, with the financial sector portion of the Standard & Poor's 500 at twenty-one percent of the total, an increase of five and a half percentage points in a decade.²⁸ With the leverage that securitization provided, the productivity of the financial institutions compared to the capital they held seemed to increase, though sizable risks were held off-balance-sheet, through securitization and derivatives, for example.²⁹

²⁵ Bernanke, *supra* note 10.

²⁶ See e.g., Steven L. Schwarcz, The Alchemy of Asset Securitization, 1 STAN. J.L. BUS. & FIN. 133, 133 (1994) (explaining "why securitization enables many companies to raise funds at a lower cost than through traditional financing"); Steven L. Schwarcz, The Parts Are Greater Than the Whole: How Securitization of Divisible Interests Can Revolutionize Structured Finance and Open The Capital Markets to Middle-Market Companies, 1993 COLUM. BUS. L. REV. 139, 140 ("Structured finance offers a company important advantages over other approaches to raising capital."); Steven L. Schwarcz, Structured Finance: The New Way to Securitize Assets, 11 CARDOZO L. REV. 607, 607-08 (1990) (discussing the advantages of structured finance within the context of corporate finance).

²⁷ L. Randall Wray, Lessons from the Subprime Meltdown 27-28 (Levy Econ. Inst. Of Bard Coll., Working Paper No. 522, 2007), available at http://ssrn.com/abstract=1070833.

¹⁸ Kevin Warsh, Governor, Bd. of Governors of the Fed. Res. Sys., The Promise and Peril of the New Financial Architecture, Speech at the Money Marketeers of New York University (Nov. 6, 2008), http://www.federalreserve.gov/newsevents/speech/warsh20081106a.htm.

²⁹ Donald L. Kohn, Vice Chairman, Bd. of Governors of the Fed. Res. Sys., Productivity and

Exactly how securitization is accomplished has been extensively described elsewhere, and therefore the following is merely a thumbnail sketch.³⁰ In the process of mortgage securitization, a pool of mortgages is assembled ("pooled") and transferred to an entity designed solely to hold those loans (the "Special-Purpose Vehicle" or SPV). Securities are then issued which are backed by those mortgages, and the securities are sold to investors, who will be repaid from the payments made by borrowers or the proceeds of foreclosure sales. A servicer collects the mortgage payments and may foreclose if necessary. Typically, an investment house is involved in the pooling of subprime mortgages and resulting sale of securities, and a rating agency rates the resulting securities. To provide different investors with securities featuring different sets of risk and rewards, interest in the payment flow from the mortgages is divided up into different strips of payments, called tranches, so that some securities receive an earlier and more secure income stream in exchange for a lower return. The securitization is set up so that the majority of the resulting securities would be rated AAA by the rating agencies, indicating that they should be highly secure. Other securities would receive less secure payment streams with the chance of higher returns, and were normally given lower credit ratings as a result. In a typical securitization of residential mortgagebacked securities (RMBS), about eighty percent of the resulting securities would be rated AAA, considered "investor grade," another ten percent AA, five percent A, and five percent BBB+ or lower.³

The securitization of subprime loans began in the late 1980s, when subprime lenders concentrated in Orange County, California, discovered that they could offload their subprime loans to Wall Street investors by selling securities based on pools of those subprime loans.³² These lenders had been "hard money" lenders, requiring low loan-to-value (LTV) ratios and relying on the ability to foreclose on substantial equity in the house should the borrower default.³³ When Wall Street discovered hard money

Innovation in Financial Services, Speech at the Official Celebration of the 10th Anniversary of the Banque Centrale du Luxembourg (Nov. 12, 2008), http://www.federalreserve.gov/newsevents/speech /kohn20081112a.htm.

³⁰ For explanations of that process, see Eggert, *Held Up in Due Course, supra* note 22, at 535–45; Kathleen C. Engel & Patricia A. McCoy, *Turning a Blind Eye: Wall Street Finance of Predatory Lending*, 75 FORDHAM L. REV. 2039, 2045–48 (2007) (discussing the evolution of private label securitization); Christopher L. Peterson, *Predatory Structured Finance*, 28 CARDOZO L. REV. 2185, 2199–2213 (2007) (providing an overview of the structured finance process from origination to securitization).

³¹ John Kiff & Paul Mills, *Money for Nothing and Checks for Free: Recent Developments in U.S. Subprime Mortgage Markets, in* Int'l Monetary Fund, *United States: Selected Issues,* at 37, 39, IMF Country Report No. 07/265, July 11, 2007, *available at* http://imf.org/external/pubs/ft/scr/2007/cr07265.pdf.

³² John Gittelsohn, *How Subprime Started in Orange County, Calif.*, ORANGE COUNTY REG. (Cal.), Dec. 30, 2007, *available at* LEXIS, News Library, MCTBUS File.

³³ Comment, *Everybody Goes Lending, Lending USA*, MORTGAGE STRATEGY, June 16, 2008, at 32, *available at* LEXIS, News Library, MORSGY File.

lenders, these lenders went mainstream. A reporter explained, "'Hard money' gave way to 'B&C' which gave way to more advertising-friendly monikers like 'home equity,' 'sub-prime' or 'non-prime.'"³⁴ In the early 1990s, there were few subprime mortgage originations, but with securitization, subprime boomed, and subprime origination topped \$625 billion dollars by 2005.³⁵ That same year, the peak year for issuance of subprime RMBS, \$508 billion of such securities were sold on Wall Street.³⁶

Once Wall Street discovered how to securitize subprime loans, and investors discovered that AAA-rated securities backed by subprime loans provided a greater return than some other investments rated as equally secure, the complex financial engineering kicked into high gear. If risky subprime loans could be converted into securities, many of them rated AAA, then other risky assets could receive the same treatment, including the junior tranches of subprime RMBS. The lower-rated tranches of subprime RMBS were pooled and transferred to a new SPV, often along with other assets, and collateralized debt obligation (CDO) securities backed by these assets held by the SPV were created.³⁷ In that way, new AAA-rated securities could be created from the lower rated and previously hard to sell tranches of subprime loan pools.³⁸ Even though they were created from BBB, or worse, RMBS, as much as 80% of the resulting CDO securities would be rated AAA.³⁹ CDO issuance boomed, increasing from \$300 billion to almost \$2 trillion between 1997 and 2006.⁴⁰

Enterprising Wall Street denizens even created CDO-squared or cubed, where the CDO securities were pooled and tranched, whereby new AAA-rated securities could be created from the riskier CDO tranches.⁴¹ Often, the lower ranked tranches of securities from CDOs were those resecuritized in new CDOs.⁴² Many of the resulting securities were highly rated despite their great risk. According to a 2007 report, "Some 80% of these structures likewise boast triple-A ratings, even though some industry insiders say the value of the instruments would be wiped out, from the

³⁴ Id.

³⁵ Chomsisenghet et al., *supra* note 14.

³⁶ Gittelsohn, *supra* note 32.

³⁷ Joseph R. Mason & Joshua Rosner, Where Did the Risk Go? How Misapplied Bond Ratings Cause Mortgage Backed Securities and Collateralized Debt Obligation Market Disruptions 70 (May 3, 2007) (unpublished working paper), *available at* http://ssrn.com/abstract=1027475.

³⁸ See Yongheng Deng et al., CDO Market Implosion And The Pricing Of Subprime Mortgage-Backed Securities 3 (Working Paper No. Mar. 2009), available at http://ssrn.com/abstract=1356630.

³⁹ See, e.g., Jonathan R. Laing, Aftershock of US Sub-Prime Debacle will be Felt on a Global Scale, THE BUSINESS (UK), July 14, 2007, available at LEXIS, News Library, SUNBUS File.

⁴⁰ Yongheng Deng et al., *supra* note 38, at 3.

⁴¹ See Paul Mizen, The Credit Crunch of 2007–2008: A Discussion of the Background, Market Reactions, and Policy Responses, 90 FED. RES. BANK ST. LOUIS REV. 531, 537–38 (2008), available at http://research.stlouisfed.org/publications/review/08/09/Mizen.pdf.

⁴² Kiff & Mills, *supra* note 31, at 39.

triple-A tranches down, if the underlying collateral suffered cumulative losses of around 5%."⁴³ Through its mysterious alchemy, securitization could create highly rated securities backed by the riskiest twenty percent of tranches of securities built from the riskiest twenty percent of tranches of securities based on already default-prone subprime loans. Securitization seemed to be able to spin endless amounts of Wall Street gold, in the form of AAA-rated securities, out of even the most suspect and speculative straw.

The resulting securities were so far removed from the initial subprime mortgages on which they depended that it was almost impossible for investors to track CDO securities to the subprime mortgages that created their value. Instead, they depended by and large on the ratings provided at the time of securitization. However, as we shall see, even the rating agencies were overwhelmed by the complexity of the securities they were rating; in many cases they rated securities without an adequate past history to predict future behavior or sufficient analysis of the likelihood of loss.

The entire house of cards-the subprime RMB securities, the CDOs based on RMB securities, and the CDOs-squared and cubed-depended on the payments made by borrowers and the likelihood that the borrowers would continue to make their payments. However, while all of these complex assets depended on repayment by borrowers, securitization undermined the likelihood of that repayment. As will be discussed in the next section, securitization made repayment by borrowers less likely by degrading the quality of underwriting that subprime originators used in determining which borrowers to lend to and at what terms and by encouraging the use of more risky loan models. Securitization not only undermined underwriting standards, it also for a time successfully concealed the declining underwriting standards from many investors, as many investors did not have the information they needed to discover the decline in underwriting.⁴⁴ Securitization gave loan originators an incentive to make loans that were too likely to default as well as the tools to conceal poor loan quality from the ultimate purchasers of those loans: the investors in mortgage-backed securities or in other financial instruments ultimately backed by mortgage-backed securities. In this way, subprime lenders could take advantage of borrowers and investors alike.

IV. "Hard" and "Soft" Mortgage Underwriting

To see how securitization degraded underwriting, it is important to understand the process and purpose of loan underwriting. Underwriting is

⁴³ Laing, *supra* note 39.

⁴⁴ See Small Business Hearing, supra note 16, at 2 (claiming that the lack of information caused by a deterioration in underwriting was a "significant hindrance" to investors).

the systematic analysis of risk associated with a particular loan and the determination before the loan is made whether the likely reward associated with the loan is worth that risk.⁴⁵ Underwriting is based on the observable characteristics of the borrower, the loan, the security, and outside influences on the borrower, loan, and security at the time of the origination of the loan, and then comparing those characteristics to historical patterns of default.⁴⁶ The purpose of underwriting is to reject loans that are too risky given the market interest rate, and therefore it is a primary form of credit rationing.⁴⁷ Underwriting is crucial to lending because, while defaults are historically fairly rare, they are extremely costly to the holders of the loan, making the mortgage-default function "extremely asymmetric."⁴⁸

A loan has different elements of risk, including whether: the loan will be prepaid, with principal returned but no further interest payments; a loan will default and the income stream from the loan will be interrupted or cease; the holder of the loan will have to foreclose on the security and so incur the costs associated with foreclosure; the value of the security will not be sufficient to protect the holder of the loan's interest should the borrower default; and/or litigation will ensue, either in claims against the borrower or the borrower's claims against the lender.⁴⁹ There are risks that reside with the individual borrower and the specific property, such as the likelihood that the individual borrower will lose his or her job or the value of the property will decline. There are also systemic risks: inflation will increase and interest rates go up, making a loan at a fixed rate less valuable; the overall economy will decline, making it more likely that the borrower will be unable to repay or that the overall value of property will decline, reducing the value of the property securing the loan. A third type of risk is associated with the loan itself; a loan may be too large given the borrower's ability to repay, have a high interest rate, or it may have other characteristics that increase the likelihood of default independently of the

⁴⁵ Geetesh Bhardwaj & Rajdeep Sengupta, *Where's the Smoking Gun? A Study of Underwriting Standards for US Subprime Mortgages* 7 (Fed. Res. Bank of St. Louis Working Paper Series, Working Paper No. 2008-036A, 2008), *available at* http://ssrn.com/abstract=1286106.

⁴⁶ *Id.* (noting that "[m]ortgage underwriting refers to the process used by a mortgage (lender) to assess the credit risk of the mortgagor (borrower)" and "involves summarizing the ex ante risk of default from a profile of borrower attributes with the purpose of approving or denying the borrower's loan application," and therefore "is based on the borrower's observable characteristics at the time of origination") (emphasis omitted).

⁴⁷ See Tyler T. Yang et al., An Analysis of the Ex Ante Probabilities of Mortgage Prepayment and Default, 26 REAL EST. ECON. 651, 652 (1998) (stating that mortgage underwriting "rations mortgage quantity by rejecting those loans that are deemed too risky at the market interest rate").

⁴⁸ Susan Wharton Gates et al., *Automated Underwriting in Mortgage Lending: Good News for the Underserved?*, 13 HOUSING POLICY DEBATE 369, 384 (2002).

⁴⁹ See Engel & McCoy, *supra* note 30, at 2050–54 (discussing the risks of default, prepayment, and litigation); Michael H. Schill, *An Economic Analysis of Mortgagor Protection Laws*, 77 VA. L. REV. 489, 492–94 (1991) (discussing the costs of foreclosure litigation and the potential that the resale of the property will be inadequate to cover the debt owed).

borrower or property characteristics or the systemic risks.⁵⁰

While the empirical research on the cause of homeowner default is sometimes conflicting, the prime determinants of default appear to be borrowers' income and assets, and the loan-to-value ratio (LTV) of the loan to the house securing it.⁵¹ The LTV is "the ratio of the unpaid principal balance of the loan to the lesser of the appraised value or sales price of the property."⁵² The LTV incorporates the homeowner's equity in the house, a crucial element because borrowers with positive equity can often sell their homes or refinance their loans if they run into payment trouble.⁵³

Borrower income is used in two separate ratios employed by lenders to determine borrowers' ability to repay debt. One ratio is the borrower's "total-debt-to-income" ratio, or "total debt ratio," with debt including all fixed installment debt, such as student or car loans, along with payments on the proposed mortgage loan.⁵⁴ Another ratio is "housing-expenses-to-gross-income," with American households averaging between fifteen and forty percent of their income spent on housing.⁵⁵

Credit scores also play a large role in predicting default, as do external market conditions in causing default.⁵⁶ Credit scores are the attempt to reduce a borrower's credit history to a single number, weighting such elements as a borrower's payment history and whether a borrower has defaulted on other loans.⁵⁷ Fair, Isaac & Company has a virtual monopoly on the sales of credit scoring, supplying credit scoring models to the three major credit bureaus; hence credit scores are called "FICO" scores, even though there are three separate agencies that can supply conflicting scores based on their individual models.⁵⁸ FICO scores are based on information

⁵⁰ INST. OF FIN. EDUC., RESIDENTIAL MORTGAGE LENDING, *excerpted in* GERALD KORNGOLD & PAUL GOLDSTEIN, REAL ESTATE TRANSACTIONS 389–90 (4th ed. 2002).

⁵¹ See Michelle A. Danis & Anthony Pennington-Cross, *The Delinquency of Subprime Mortgages* 8–9 (Fed. Res. Bank of St. Louis Working Paper Series, Working Paper No. 2005-022A, 2005), *available at* http://ssrn.com/abstract=761804 (citing two studies which report the importance of income and LTV as empirical indicators of delinquency).

⁵² GEORGE LEFCOE, REAL ESTATE TRANSACTIONS 217 (5th ed. 2005).

⁵³ See Richard L. Cooperstein et al., *Modeling Mortgage Terminations in Turbulent Times*, 19 AREUEA J. 473, 473 (1991) ("When the market value of a home is sufficient to provide a net capital gain, the owner has three options: to hold, sell, or refinance.").

⁵⁴ LEFCOE, *supra* note 52, at 215.

⁵⁵ *Id.* Another less precise ratio is the "Gross Annual Income Multiplier" (GAIM), which assumes that a borrower can typically afford a loan balance two to three times their annual income, depending on other factors such as interest rates. *Id.*

⁵⁶ See Danis & Pennington-Cross, *supra* note 51, at 9 (finding credit scores, economic conditions in the labor and housing markets, and, with respect to nonprofit lenders, the internal incentive structure of the nonprofit agency to all be significant factors).

⁵⁷ LEFCOE, *supra* note 52, at 216.

⁵⁸ See Charu A. Chandrasekhar, Can New Americans Achieve the American Dream? Promoting Homeownership in Immigrant Communities, 39 HARV. C.R.-C.L. L. Rev. 169, 179 n.50 (2004) (referring to credit scoring as a "well-institutionalized process") (citing DEANNE LOONIN & CHI CHI WU, NAT'L CONSUMER LAW CTR., CREDIT DISCRIMINATION 1 (3d ed. 2002)); see also LEFCOE, supra

provided by the credit reporting agencies.⁵⁹ Credit scores do not exactly correlate with income, in that high-income borrowers may have low credit scores, and vice versa, depending on their payment histories.⁶⁰ FICO scores range from 300 to 900, with most scores between 600 and 800.⁶¹ One indication of a subprime loan is that the borrower has a FICO score below 660, according to bank regulators, or 620, among lenders.⁶²

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Another important determinant of default is the occurrence of "trigger events," life events that increase the difficulty of making mortgage payments, such as unemployment or divorce. However, it is difficult to predict at loan origination whether such events will occur or how the borrowers will react.⁶³ Ignoring greater market conditions for the moment, underwriting to a great extent depends on a three-legged stool, with credit scores as one leg, LTV as another, and borrower income and assets compared to debt load as the third.⁶⁴ These three legs have been described as the "three C's': capacity, credit reputation, and collateral," with capacity being the "borrower's income, debts, and cash reserves," credit reputation—represented by the credit score—the borrower's history of repayment as well as account information such as balance and age of account, and collateral including both the property and the amount of the borrower down payment.⁶⁵

Another central aspect of underwriting is documenting the above criteria, including "the extent to which the mortgagor's income and assets have been verified by third party sources such as employers, tax returns, and bank account statements."⁶⁶ Without adequate documentation, all of the criteria on which a loan is underwritten are called into question. Where loans are not fully documented, the level of risk for the loans to some extent is determined by which party requested the lack of documentation.

note 52, at 216 (noting that mortgage companies "all ponder pretty much the same information").

⁵⁹ Deanne Loonin & Elizabeth Renuart, *The Life And Debt Cycle: The Growing Debt Burdens of Older Consumers and Related Policy Recommendations*, 44 HARV. J. ON LEGIS. 167, 177 n.74 (2007). ⁶⁰ See LEFCOE, *supra* note 52, at 216 ("Borrowers with higher incomes don't necessarily have the

best credit scores."). ⁶¹ Amy Buttell Crane, *Don't Let Mortgage Insurance Surprise You At Closing Table*, SEATTLE

POST-INTELLIGENCER, Oct. 21, 2006, at E2, available at LEXIS, News Library, SEAPIN File.

⁶² EUGENE A. LUDWIG ET AL., THE COMMUNITY REINVESTMENT ACT: PAST SUCCESSES AND FUTURE OPPORTUNITIES, *in* REVISITING THE CRA: PERSPECTIVES ON THE FUTURE OF THE COMMUNITY REINVESTMENT ACT FRANCISCO 84, 93 (A Joint Publication of the Fed. Reserve Banks of Boston and San Francisco, Feb. 2009), *available at* http://www.frbsf.org/publications/community/cra/index.html.

⁶³ See CHRISTOPHER E. HERBERT, THE ROLE OF TRIGGER EVENTS IN ENDING HOMEOWNERSHIP SPELLS: A LITERATURE REVIEW AND SUGGESTIONS FOR FURTHER RESEARCH 6 (2004), available at http://www.abtassociates.com/reports/trigger_final_report.pdf ("[T]he financial impact of specific trigger events are likely to vary a great deal across borrowers.").

⁶⁴ While higher LTV ratios increase the risk of default, they appear to decrease the risk of prepayment, as borrowers have greater difficulty refinancing the loans. Therefore, higher LTV ratios do have some beneficial effect for lenders. Danis & Pennington-Cross, *supra* note 51, at 17.

⁶⁵ LEFCOE, *supra* note 52, at 215.

⁶⁶ Andrew Haughwout, Richard Peach, and Joseph Tracy, Juvenile Delinquent Mortgages: Bad Credit or Bad Economy?, *Federal Reserve Bank of New York Staff Reports*, no. 341, 1, Aug. 2008.

Where borrowers request low or no documentation loans, those loans are more likely to default than instances where the lender determines that full documentation is not required.

Subprime loans are typically more prone to default than prime, resulting in the generally higher interest rates and fees that subprime borrowers pay.⁶⁷ Even before the subprime crisis, non-prime loans were estimated to be six times as likely to go into default as prime loans.⁶⁸ However, attempting to compensate for risk by charging higher prices for subprime loans only adds to the risk, as the higher interest rate and/or fee makes the subprime loan more likely to default.⁶⁹ Subprime loans are an odd product in that the seller's attempt to compensate for risk of default increases the very risk at issue.

Some subprime loans are more risky than others. Some are likely to default simply because the amount of mortgage payments are more than the borrower can afford. For others, however, the likelihood of default is increased by the way the loan is structured. Examples of loans that by their very nature are more risky than traditional 30-year fixed loans are: hybrid adjustable-rate mortgages, often called 2/28s or 3/27s because they are fixed for two or three years and are then adjustable for the remainder of the thirty year term. These loans are designed to force borrowers to refinance after two or three years, essentially allowing the lender to call the loan at that point by forcing a refinancing unless the borrower is willing and able to make a significantly higher monthly payment.⁷⁰ Also more prone to default are payment option adjustable-rate mortgages, where the borrower can, for a time, choose to make monthly payments less than needed to pay principal and interest, allowing for "negative amortization" where the loan principal increases rather than decreases.⁷¹

Adjustable rate loans transfer from lenders to borrowers the risk that interest rates will increase, as compared to fixed rate loans where lenders retain that risk. However, adjustable rate loans transfer that risk in a manner that may be difficult for borrowers to understand or predict. This risk transfer increases the sensitivity of and danger to borrowers regarding

⁶⁷ Gary Gorton, *The Panic of 2007*, Prepared for the Federal Reserve Bank of Kansas City, Jackson Hole Conference, Aug., 2008, 6 (2008) *available at* http://www.kc.frb.org/publicat/sympos/2008/Gorton.08.04.08.pdf.

⁶⁸ Souphala Chomsisengphet & Anthony Pennington-Cross, *The Evolution of the Subprime Mortgage Market*, 88 FED. RES. BANK OF ST. LOUIS REV. 31, 32 (2006), *available at* research.stlouisfed.org/publications/review/06/01/ChomPennCross.pdf.

⁶⁹ See Wray, *supra* note 27, at 9 (finding these so-called "affordability products" not to be affordable due to subsequent need for refinancing and payment penalties). Wray's article expounds on the writings of the noted financial system commentator Hyman Minsky. *Id.* at 2.

⁰ Gorton, *supra* note 67, at 13.

⁷¹ Subprime Mortgage Crisis and America's Veterans: Hearing Before the Subcomm. on Econ. Opportunity of the H. Comm. on Veterans' Affairs, 110th Cong. 47 (2008) (statement of Ellen Harnick, Sr. Policy Counsel, Ctr. for Responsible Lending).

economic and financial conditions that can increase interest rates.⁷² Since these loans are often structured with an introductory lower "teaser rate," borrowers can experience "reset shock" when their mortgage payments increase substantially.⁷³ The existence of this reset shock may come as a surprise to borrowers who were not adequately informed of it by their lenders or brokers.⁷⁴ The timing of the payment increases for payment option loans is often a surprise, as the loan may readjust when the loan balance reaches a set cap rather than waiting a set number of years.⁷⁵ It is possible to overstate the effect of the reset shock, however, because the initial teaser rates charged to borrowers often were not very low to begin with, so the new rates might not be that much higher.⁷⁶ Hybrid adjustable rate mortgages were quite popular with securitizers and made up almost three-quarters of securitized subprime loans by 2004.⁷⁷

Underwriting can be characterized as two general types, though both types may and should be used and there may be overlap between the types. On the one hand, a lender may rely on "soft" mortgage underwriting, that is subjective, personalized underwriting that depends on direct, often difficult to quantify "soft" information about the borrower, the property, the local economy, etc. This may include knowledge about the likelihood that a borrower will lose a job or gain another, and whether a neighborhood is going up or down in value.⁷⁸ "Soft" information may also include listening to the borrower's explanation for past credit difficulties in an attempt to discover whether such problems will reoccur.⁷⁹ Soft mortgage underwriting involves not only the use of soft information, but also "soft analysis," human, somewhat subjective analysis of the risk as opposed to an automated, strictly objective analysis.

A lender may also use "hard" mortgage underwriting, now normally automated, which relies on objective information that can be determined and confirmed with little direct knowledge of the borrower. "Hard"

 $^{^{72}}$ See Chomsisengphet et al., supra note 14, at 12 ("[T]he increasing use of exotic and new mortgage products helped to set the stage by increasing the sensitivity of a cohort of loans and borrowers to contemporaneous economic and financial conditions.").

⁷³ Kiff & Mills, *supra* note 31, at 42, 44.

⁷⁴ Gil Sandler, Aggressive Mortgage Lending and the Housing Market: The Economic Impact of Minor Miscalculations, 24 REAL ESTATE FIN. 3 (2007).

⁷⁵ See id. at 42–43 (describing how loans may convert upon hitting a set cap and suggesting that "[f]raud appears to have played a key role in accelerating the deterioration").

⁷⁶ See Christopher L. Foote et al., Subprime Facts: What (We Think) We Know About the Subprime Crisis and What We Don't 2 (Fed. Res. Bd. Pub. Pol'y Discussion Papers, Paper No. 08-2), available at http://www.bos.frb.org/economic/ppdp/2008/ppdp0802.pdf ("Subprime teaser rates were not exceptionally low... The interest-rate resets, although not trivial, were not explosive.").

⁷⁷ Wray, *supra* note 27, at 31.

⁷⁸ Uday Rajan et al., *The Failure of Models That Predict Failure: Distance, Incentives and Defaults* 3 (Chi. Graduate Sch. Bus., Research Paper No. 08-19, 2008), *available at* http://ssrn.com/abstract=1296982.

⁷⁹ Because this involves listening to the borrower's story, loans made on this basis have been called "story loans." LEFCOE, *supra* note 52, at 217.

information includes data or analyses provided by third parties. This objective information may include FICO scores and loan to value ratios based on third party or automated appraisals.⁸⁰ This hard information can be fed into automated underwriting systems that use solely objective criteria to make underwriting decisions, and such underwriting is "hard" both in terms of the information used and also the method of analysis by an automated system.

Each type of underwriting has its own strengths and weaknesses. Subjective, personal underwriting may protect a lender from borrower or broker fraud that involves the misstatement of the borrower's income or the property's value, as the lender could have enough independent information or direct observation regarding income or property value to spot significant misstatements. On the other hand, more purely subjective underwriting more easily allows lenders or their agents to engage in and conceal such underhanded activities as red-lining against minority borrowers, refusing to lend to borrowers for reasons other than the likelihood of repayment or loss, and lending based on friendship or favors.⁸¹ Subjective underwriting therefore requires monitoring of lenders' underwriters to insure consistency and lack of favoritism. Subjective, personal underwriting is normally more labor and time intensive, as it may depend on human analysis of the borrower's income and expenses and the likelihood of change, as well as other risk factors. Similarly, decisions about whether to grant a loan may take more time if they depend on subjective observations and analysis of the borrower and property.⁸

Automated, objective underwriting has a contrasting set of strengths and weaknesses. By relying on objective criteria and removing subjective decision making, automated underwriting may well be more accurate, by itself, than manual underwriting would be by itself, at least according to one study.⁸³ When underwriting decisions are made based on objective information that can often be easily and quickly obtained, such as the borrower's FICO score or LTV ratio, loan decisions can be made more quickly and inexpensively. Instead of taking weeks, loan approval can be made in seconds, giving lenders who can grant quick approval to loans a competitive edge over slower lenders.⁸⁴ A survey conducted by Fannie Mae in 2001 found that automated underwriting saved lenders on average

⁸⁰ Charles D. Anderson et al., Deconstructing the Subprime Debacle Using New Indices of Underwriting Quality and Economic Conditions: A First Look 3 (July 15, 2008) (unpublished working paper), *available at* http://ssrn.com/abstract=1160073.

⁸¹ Gates et al., *supra* note 48, at 373.

⁸² Rajan et al., *supra* note 78, at 3.

⁸³ Id.

⁸⁴ Lynnley Browning, *The Subprime Loan Machine; Automated Underwriting Software Helped Fuel A Mortgage Boom*, N.Y. TIMES, Mar. 23, 2007, at C1, *available at LEXIS*, News Library, NYT File.

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\$916 to close a loan.⁸⁵ Automated underwriting substantially increased the potential volume of loans subprime lenders could make, both by reducing the time and cost of making loans, but also by helping lenders identify subprime credit-worthy borrowers they might have otherwise missed.⁸⁶ Objective underwriting is also a weapon in the war against red-lining. A lender who decides whether to make loans strictly based on FICO scores and LTV ratios is less likely to deny loans based on gender or ethnicity.⁸⁷ On the other hand, minority borrowers typically have lower FICO scores than their white counterparts, with the frequency of low scores, those below 620, more than double among blacks than among whites.⁸⁸

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"Soft" mortgage underwriting is much better at reacting to new mortgage conditions or products, as the underwriters can apply commonsense to the changing conditions. By comparison, "hard" mortgage underwriting depends much more on statistical analyses based on historical default rates. Where market conditions or products change rapidly and substantially, automated underwriting programs may continue to apply their now antiquated statistical analysis and so approve many loans that they should not.⁸⁹ With the recent dramatic changes in the types of loans offered, the borrowers they were offered to, and when and why documentation was required, automated underwriting became unmoored from its database of historic default rates, as it was being asked to analyze risk for loans, borrowers, and documentation levels that had never been put together before on a wide-spread basis.

A weakness of hard mortgage underwriting, given its reliance on purportedly objective criteria, is the resulting possibility that brokers or lenders can learn the criteria and so discover how to manipulate the system to justify the greatest volume of loans. One way for brokers or sales agents to maximize their commission, often based on loan amount, is to push borrowers to obtain the largest loan possible. This upselling of amount is combined with upselling of interest rates, as yield spread premiums encourage brokers to entice borrowers into paying higher interest rates.⁹⁰ In this way, automated underwriting increases the fragility of the financial system by encouraging the creation of loans at the margin of those

⁸⁵ Id.

⁸⁶ Id.

 $^{^{87}}$ Gates et al., *supra* note 48, at 374.

⁸⁸ LEFCOE, *supra* note 52, at 217.

⁸⁹ Rajan et al., *supra* note 78, at 28 (stating: "However, when incentive effects lead to a change in the underlying regime, the coefficients from a statistical model estimated on past data have no validity going forward . . . Importantly, collecting historical data over a longer time period is likely to exacerbate the problem by aggregating data from different regimes.").

⁹⁰ Hearings Before the H. Subcomm. on Financial Institutions and Consumer Credit of the H. Comm. on Financial Services, 111th Cong. 3 (2009), available at http://www.house.gov/apps/list/ hearing/financialsvcs_dem/gordon_testimony_3-11-09_final.pdf (testimony of Julia Gordon, Center for Responsible Lending).

tolerated by the automated system rather than a broad range of loans.⁹¹ To make matters worse, "the loan performance data used to develop predictive factors were collected at a time when there was not as much upselling. Therefore, data were collected about average distributions, not at the margin."⁹² In other words, automated underwriting systems are based on a past distribution of loans, but securitization has encouraged a more risky distribution of loans.

Because mortgage brokers' income depends in large part on how many loans they can close, and because they are repeat and interested players in the loan approval process, they have the incentive and ability to discover even more nefarious ways to game the system, including manipulation of the hard data input into the underwriting process. The consequence of the manipulation is that borrowers who should not be eligible and may be unlikely to repay their loans still have their loans approved. The evidence indicates that loans involving third party originators, such as brokers, default at a higher rate than loans made directly by lenders.⁹³ Lenders that gather significant soft information often should be able to detect this manipulation, but as we shall see, because many subprime underwriters either did not engage in soft mortgage underwriting or, worse yet, participated in the manipulation of the hard criteria, the quality of underwriting in the subprime market declined significantly between 2000 and 2007.

V. THE DECLINE OF SUBPRIME UNDERWRITING

Many knowledgeable observers have concluded that the process of underwriting subprime loans became compromised during the run-up to the 2007 subprime meltdown, and that loans that were more and more likely to default were made and securitized. Despite the weakening underwriting and increased likelihood of default, the top tiers of securities from those loans typically were still rated AAA. Federal Reserve Board Chairman Ben Bernanke noted in 2008 that the underwriting standards had become increasingly compromised in recent years, with subprime loan origination only the "most notorious example."⁹⁴ As noted in 2008 by the first report of the State Foreclosure Prevention Working Group:

Weak or non-existent underwriting coupled with high

⁹¹ Bill Lehman, *The Future of Automated Underwriting*, MORTGAGE BANKING, Mar. 1, 2008, at 37, 40.

⁹³ William P. Alexander et al., Some Loans Are More Equal than Others: Third-Party Originations and Defaults in the Subprime Mortgage Industry, 30 REAL ESTATE ECON. 667, 668 (2002).

^{(2002).} ⁹⁴ Ben S. Bernanke, Chairman, Fed. Res. Bd., Risk Management in Financial Institutions, Speech at the Federal Reserve Bank of Chicago's Annual Conference on Bank Structure and Competition (May 15, 2008), http://www.federalreserve.gov/newsevents/speech/bernanke20080515a.htm.

levels of origination fraud combined to produce loans that had no reasonable prospect of being repaid. Rather, these loans were originated based on the assumption that housing appreciation would continue indefinitely and that when borrowers ran into trouble, they would refinance or sell.⁹⁵

That underwriting had degraded in the years before the 2007 subprime crisis has become a truism, repeated by multiple governmental studies and other commentators.⁹⁶ Market participants have acknowledged the decline of underwriting, with one rating agency CEO claiming that his agency did not "appreciate the extent of shoddy mortgage origination practices and fraud in the 2005–2007 period."⁹⁷ Even critics of the idea that the drop in underwriting standards caused the subprime collapse have acknowledged that "[t]he dominant explanation for the meltdown in the US subprime mortgage market is that lending standards dramatically weakened after 2004."⁹⁸

In a 2002 article, this author argued that securitization compromises underwriting for several reasons.⁹⁹ First, because originators immediately sell their loans, they shed much of the risk of default for those loans, transferring it to investors. This shedding of default risk drastically decreases the value of underwriting to loan originators, except to the extent it helps them sell their loans. Next, securitization reduces individualized underwriting (soft mortgage underwriting) and instead depends on automated underwriting and objectively verifiable criteria (hard mortgage underwriting).¹⁰⁰ With these changes, we lost what had been a strength of banks' underwriting systems—their information gathering systems and their long-term relationships with borrowers—and a result has been

⁹⁵ STATE FORECLOSURE PREVENTION WORKING GROUP, ANALYSIS OF SUBPRIME MORTGAGE SERVICING PERFORMANCE 5 (2008), *available at* http://www.csbs.org/Content/NavigationMenu/Home/StateForeclosurePreventionWorkGroupDataReport.pdf.

⁹⁶ "Underwriting standards for U.S. adjustable-rate subprime mortgages weakened dramatically between late 2004 and early 2007." THE PRESIDENT'S WORKING GROUP ON FINANCIAL MARKETS, POLICY STATEMENT ON FINANCIAL MARKET DEVELOPMENTS 9 (2008), *available at* http://online.wsj. com/documents/pwgpolicystatement20080313.pdf.

Misaligned incentives were most conspicuous in the poor underwriting and in some cases fraudulent practices that proliferated in the U.S. subprime mortgage sector, especially from late 2004. Many of the subprime loans underwritten during this time had multiple weaknesses: less creditworthy borrowers, high cumulative loan-to-value ratios, and limited or no verification of the borrower's income.

FINANCIAL STABILITY FORUM, REPORT OF THE FINANCIAL STABILITY FORUM ON ENHANCING MARKET AND INSTITUTIONAL RESILIENCE 7 (2008), *available at* http://www.fsforum.org/publications/ r_0 804.pdf.

⁹⁷ Credit Rating Agencies and the Financial Crisis: Hearing Before the H. Comm. On Oversight and Gov't Reform, 110th Cong. (2008), available at http://oversight.house.gov/documents/ 20081022124926.pdf [hereinafter Financial Crisis Hearing] (statement of Stephen W. Joynt, President and Chief Executive Officer, Fitch, Inc.).

⁹⁸ Bhardwaj & Sengupta, *supra* note 45, at 1.

⁹⁹ Eggert, *Held up in Due Course, supra* note 22, at 550–51.

¹⁰⁰ *Id.* at 550.

increasing defaults and foreclosures.

The same 2002 article also argued that securitization turned subprime lending over to thinly capitalized lenders that relied on the financial markets for their capital, and so could engage in a "boom, bust, and bankruptcy" cycle, in which they grew dramatically, made more and more loans, often with high default risk, and then disappeared or declared bankruptcy, leaving few assets for their borrower victims or other creditors to attach.¹⁰¹ In Part XI, it is argued that this boom and bust design is at the heart of the subprime crisis, as there are few constraints on lenders not to make bad loans where the lenders are paid by loan volume and know that they soon may be out of business, regardless of their lending standards.

Since the beginning of the subprime crisis, there have been several studies that attempt to determine the existence and extent of this decline in underwriting standards. To date, these studies appear to verify the above thesis: securitization increases the risk of default by undermining careful underwriting, which employs both hard and soft mortgage underwriting. Loan originators that securitize their loans have little incentive to gather and analyze the soft information not valued by the secondary market and so depend more and more exclusively on "hard," objective, automated mortgage underwriting.

Using a loan level analysis of the subprime market from 2001 through 2006, several researchers have discovered that, in general, underwriting of subprime loans changed during those years, with lenders appearing to improve the objectively perceived quality of loans in some respects while allowing other objective aspects of the loans to deteriorate. However, researchers who move beyond the mere objective statistics and review the overall change in underwriting conclude that subprime underwriting deteriorated substantially during the current decade and until the subprime collapse.

It should be noted, however, that research based on the original loan data produced at the time of origination is challenging because of the amount of misrepresentation and subterfuge that occurred in the subprime market. A true analysis of loan to value ratios, for example, would require a historical reappraisal of the property securing the loans, rather than reliance on what may have been flawed appraisals provided by lenders at the time the loan was originated. Another challenge is finding the combined loan-to-value ratio (CLTV) of all loans on the subject property rather than just the loan-to-value ratio of a particular loan, as borrowers increasingly relied on "piggy-backed" seconds and other second lien loans to replace private mortgage insurance (PMI) and reduce the amount of

¹⁰¹ Id. at 522.

their down-payment.¹⁰² Researchers relying on the original loan tapes for loan to value ratios and FICO scores may be at risk of making the same mistakes that investors did in believing in the stability and accuracy of these numbers to indicate credit quality.

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Demyanyk and Van Hemert concluded that some hard indicia of underwriting improved between 2001 and 2006. For example, FICO scores increased from 601 in 2001 to 621 in 2005, before dropping slightly.¹⁰³ However, objective underwriting standards also decreased in several ways. The average first lien subprime loan size in the database increased dramatically, from \$126,000 in 2001 to \$220,000 in 2007, indicating that the average subprime borrower was taking on a significantly increasing amount of debt. The combined loan-to-value ratio also increased, from 79.4% in 2001 to 85.9 percent in 2006, with the growing popularity of second and third liens, and the percentage of the more stable fixed rate subprime loans decreased from 33.2% in 2001 to 19.9% in 2006, before increasing again in 2007.¹⁰⁴

Demyanyk and Van Hemert concluded that "during the dramatic growth of the subprime (securitized) mortgage market, the quality of the market deteriorated dramatically" and that the loan quality declined, even when adjusted for changes in "borrower characteristics (such as the credit score, a level of indebtedness, an ability to provide documentation), loan characteristics (such as a product type, an amortization term, a loan amount, an mortgage interest rate), and macroeconomic conditions (such as house price appreciation, level of neighborhood income and change in unemployment)."¹⁰⁵ In other words, the quality of mortgages seemed to deteriorate beyond what the hard, objective data would indicate.

Anderson, Capozza, and Van Order also studied the underwriting standards for the subprime market and concluded that there was a two-part degradation of underwriting. In the first stage, during the 1990s, hard mortgage underwriting standards declined, possibly because investors became more comfortable with the securitization of subprime loans and so became more willing to accept loans with lower FICO scores and higher loan to value ratios.¹⁰⁶ However, a second weakening of underwriting standards occurred after 2004, with less soft mortgage underwriting that was not as apparent to the secondary market, as FICO scores and loan to value ratios remained relatively stable. Anderson et al. conclude that the weakened underwriting standards likely caused one half of the recent surge

¹⁰² Major Coleman IV et al., Subprime Lending and the Housing Bubble: Tail Wags Dog? 10 (unpublished working paper, 2008), *available at* http://ssrn.com/abstract=1262365.

¹⁰³ Yuliya Demyanyk & Otto Van Hemert, Understanding the Subprime Mortgage Crisis 7–8 (unpublished working paper, 2008), *available at* http://ssrn.com/abstract=1020396.

 $^{^{104}}$ *Id.* 105 *Id.* at 32.

¹⁰⁶ Anderson et al., *supra* note 80, at 32.

of foreclosures, with weakened economic conditions causing the rest.¹⁰⁷

Coleman, LaCour-Little, and Vandell found that if combined loan-tovalue ratios are used, even the loan to property value aspect of hard mortgage underwriting declined substantially during the run-up to the subprime crash, as combined loan-to-value ratios rose considerably from 1998 to 2006 among the loans studied.¹⁰⁸

Several studies have linked weakening underwriting directly to securitization itself. The Mian and Sufi study of the consequences of the mortgage credit expansion found a direct connection between the expansion of securitization driven credit and increased default rates. Looking at zip codes that had low access to credit before subprime securitization, the study found that "[i]n terms of magnitudes, a one standard deviation increase in 'supply-driven' mortgage debt from 2001 to 2005 leads to a one-half standard deviation increase in mortgage default rates from 2005 to 2007."¹⁰⁹ Another study, by Keys, Mukherjee, Seru, and Vig found that of two loan portfolios with similar credit quality, a portfolio more likely to be securitized experiences a twenty percent higher default rate than one less likely to be securitized, a difference the authors attribute to the originators' greater incentive to screen loans they are more likely to hold rather than sell.¹¹⁰

Dell'Ariccia, Igan, and Laeven also found a weakening of underwriting standards and that, controlling for economic conditions, the denial rate for borrowers dropped and the loan amount rate increased.¹¹¹ The study also found that denial rates were lower in areas where more loans were sold within a year of origination, indicating higher levels of securitization. Further, it found that securitization also could be tied to higher credit and to income ratios, indicating more risky loans.¹¹² The authors state, "This evidence partially supports the view that disintermediation through securitization provides lenders with incentives to extend riskier loans."¹¹³ The authors also found that underwriting standards declined where more credit was offered, where housing prices appreciated more rapidly, and where large lenders entered the market.¹¹⁴

Rajan, Seru, and Vig maintain that an increase in securitization leads to

¹⁰⁷ Id.

¹⁰⁸ See Coleman IV. et al., supra note 102, at 10 (noting CLTV increases from 77% to 88% between 1998 and 2006).

¹⁰⁹ Atif Mian & Amir Sufi, *The Consequences of Mortgage Credit Expansion: Evidence from the* 2007 Mortgage Default Crisis 4 (Nat'l Bureau of Econ. Research, Working Paper No. 13936, 2008).

¹¹⁰ Benjamin J. Keys et al., Did Securitization Lead to Lax Screening? Evidence from Subprime Loans 2–3 (unpublished manuscript, 2008), *available at* http://ssrn.com/abstract=1093137.

¹¹¹ Giovanni Dell'Ariccia et al., *Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market* 3 (Int'l Monetary Fund, IMF Working Paper No. WP/08/106, 2008), *available at* http://www.imf.org/external/pubs/ft/wp/2008/wp08106.pdf.

¹¹² *Id.* at 17.

¹¹³ *Id*.

¹¹⁴ *Id.* at 18.

a decrease in soft mortgage underwriting, as the soft information is not transferable to investors in an inexpensive and trustworthy way. The authors noted that as securitization increases, the rates of subprime loans for borrowers with similar hard credit criteria converge, indicating that lenders focus more exclusively on hard information.¹¹⁵ Worse yet, statistical models designed in periods with lower levels of securitization break down once securitization increases and soft mortgage underwriting declines, leading to excessive defaults.

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VI. ARGUMENTS THAT SECURITIZATION DID NOT UNDERMINE SUBPRIME UNDERWRITING

The primary study purporting to find that subprime underwriting did not decline following 2001 is that of Bhardwaj and Sengupta. Focusing on hard mortgage criteria, Bhardwaj and Sengupta argue that the "smoking gun" of declining underwriting standards is missing. Instead, they find that while some aspects of underwriting, such as income documentation, declined, other aspects, such as FICO scores, increased between 2000 to 2007.¹¹⁶ This study, however, relies on a database that does not include second liens,¹¹⁷ and so the LTV ratios it refers to are increasingly inaccurate as the number of second liens increased from 2003 to 2006.¹¹⁸ One review of a large pool of loans found that the incidence of second liens increased from 3.2% in 2001 to 29.4% in 2006 for subprime loans and from 2.2% to 43.9% for Alt-A mortgages.¹¹⁹ Subprime loans with simultaneous seconds default at an increased rate, and so are crucial for any study of mortgage underwriting standards.¹²⁰

Bhardwaj and Sengupta conclude that their results, "suggest that although the proportion of low-doc loans was increasing over time, lenders sought to compensate the lack of documentation by seeking borrowers of higher quality, as determined by their FICO scores."¹²¹ This begs the question, though, whether documentation of income and assets can be replaced by higher FICO scores in good underwriting. To make that argument successfully would require historical data showing that such trade-offs worked in the past. However, widespread underwriting of subprime loans without income or asset documentation was unprecedented,

¹¹⁵ Rajan et al., *supra* note 78, at 25–26.

¹¹⁶ Bhardwaj & Sengupta, supra note 45, at 3-4.

¹¹⁷ Id. at 14.

¹¹⁸ Keren Gabay, *A Closer Look at 2006's Early Payment Defaults*, MORTGAGE BANKING, May 1, 2007, at 36.

¹¹⁹ Haughwout et al., *supra* note 66, at 9.

¹²¹ Bhardwaj & Sengupta, *supra* note 45, at 16.

and therefore such historical data is missing. Recent events strongly suggest, however, that replacing documentation of income and assets with increased FICO scores represents a dramatic weakening in subprime underwriting. Furthermore, this analysis assumes that earlier no or low documentation loans were similar to later such loans. Whether the lack of documentation is lender or borrower directed is significant in determining the effect on default rates of the lack of documentation, as will be discussed.

The study also shows a decline in underwriting standards, when LTV (here, not even the full LTV but only the first lien LTV) ratios are compared to the amount of documentation for loans. Bhardwaj and Sengupta's study notes that while low documentation loans have on average higher LTV ratios, this spread narrows after 2000, so that "underwriting attempts at tempering low-documentation loans with lower LTVs on average was getting weaker over the years."¹²²

Gorton also argues that the subprime crash should not be blamed on degraded underwriting. He argues that participants in securitization up and down the food chain all had "skin in the game" and suffered significant losses during what he calls the "Panic of 2007."¹²³ While rating agencies and investment houses had significant say regarding the hard mortgage underwriting done by loan originators, as they determined which loans could be sold for securitization, they had much less influence over what soft mortgage underwriting, if any, was done, since they did not monitor the soft information. Therefore, any examination of soft mortgage underwriting must focus on the incentives of originators.

Gorton also argues that originators had incentives to engage in good underwriting, despite the rapid sale of their loans, stating that they had the requirement to repurchase loans that defaulted very quickly.¹²⁴ According to Gorton, lenders would want to underwrite to avoid rapid defaults. However, early payment defaults (EPDs) did increase dramatically before the subprime collapse, indicating the very degradation of underwriting that Gorton thought the risk of EPDs would prevent. One review of early payment defaults noted,

If we look at securitized loans, we can see that by the fourth month after issuance (typically six months after origination)—which is generally a good proxy period for measurement of EPDs—the level of seriously delinquent loans in the 2006 vintage subprime securitizations is at 4 percent (see Figure 1). This is nearly double that for the year

¹²² Id. at 21.

¹²³ Gorton, *supra* note 67, at 69.

¹²⁴ Id. at 74.

earlier (2 percent) and markedly higher than the 2003 and 2004 vintages (at 1.5 percent)¹²⁵

Another study found that, of the loans examined, "10 percent of nonprime loans originated in 2007 experienced an early default, as compared to 2.7 percent of similar loans originated in 2003."¹²⁶ Clearly, their repurchase obligations were not preventing originators from engaging in the lax underwriting that would cause early defaults.

Also, loan originators could avoid most of the market discipline of EPDs. Where originators sell to third party aggregators who then securitize the loans and where originators sell directly to a securitization trust, the deal documents typically do not include a covenant to repurchase EPDs.¹²⁷ Some originators also narrowed the window during which they had to repurchase defaulting loans, from 60 or 90 days to as little as 30 days.¹²⁸

Even where originators were bound by repurchase covenants for early defaults, they could often avoid much of the effect of those covenants. Originators could count on having to repurchase only a fraction of their loans that went into default, because of delay in default time and the possibility that servicers might foreclose rather than demand repurchase.¹²⁹ Even in the world of Fannie Mae and Freddie Mac, repurchases were expensive and so "terms are governed by extensively detailed requirements. Consequently, forced repurchase is relatively rare, and some of the GSEs' purchases that do not meet their underwriting standards remain in their portfolios."¹³⁰ Even when originators do take back defaulting loans, they could often replace the bad loans with other perhaps flawed loans they originated, further reducing their costs.¹³¹ Worse yet, if forced to repurchase loans, subprime lenders could simply go out of business after a few years of great profit.¹³²

Gorton's theory is that, rather than flawed underwriting, the subprime panic was caused by declining housing prices. However, the housing price bubble seems to have been created to a significant extent by securitization and the influx of capital into the American mortgage market, along with lax underwriting and other factors, such as the Federal Reserve Board

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¹²⁵ Gabay, supra note 118.

¹²⁶ Haughwout et al., *supra* note 66, at 2.

¹²⁷ Gabay, *supra* note 118.

¹²⁸ Id.

¹²⁹ Engel & McCoy, *supra* note 30, at 2073–74.

¹³⁰ Gates et al., *supra* note 48, at 371.

¹³¹ Engel & McCoy, *supra* note 30, at 2073–74.

¹³² Ben Bernanke, Chairman, Fed. Reserve Bd., Speech at the Fed. Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and Competition, Chicago, Illinois (May 17, 2007), *available at* http://www.federalreserve.gov/newsevents/speech/bernanke20070517a.htm; *see also* Eggert, *Held Up in Due Course, supra* note 22, at 549.

reducing its federal funds interest rate.¹³³ Without securitization and its accompanying faulty underwriting, it is doubtful that the housing bubble would have expanded to the extent it did. Therefore, even if Gorton's thesis is correct, securitization and weak underwriting were still at the heart of the collapse.

VII. HOW UNDERWRITING WAS DEGRADED

It appears clear that underwriting was degraded in the years prior to the subprime meltdown. There was little regulation in place to mandate good Federal regulators focused for the most part on the underwriting. profitability of their regulated institutions. Instead of mandating underwriting standards, "federal regulators focused almost entirely on lender safety and soundness concerns. This focus was further narrowed by the federal regulators' limited metrics for assessing safety and soundness. which centered only on the viability of lending institutions."¹³⁴ State regulators were hampered by their weak powers to oversee mortgage lenders, the dearth of state-mandated underwriting regulations and federal underwriting standards as well as preemption asserted by federal agencies, forcing them to rely on state consumer protection laws. One state attorney general complained, "It was no easy matter to prove that questionable products and practices were illegal when there were no written federal rules or regulations specifically prohibiting them."135

With little regulation on the state or federal level to prevent it, this degradation of mortgage underwriting occurred through many different methods. In some instances, borrowers acted alone in misrepresenting their financial condition. In others, borrowers collaborated with mortgage brokers and lenders to create the illusion of a higher credit value. Some borrowers were unwitting dupes for the actions of brokers and lenders who were trying to justify loans to borrowers that the borrowers would likely not be able to afford. Lenders and brokers could take advantage of borrowers by making them appear more credit worthy than they actually were and so put them into loans they could not repay. When it came to lowering underwriting standards, borrowers, brokers and lenders had several means at their disposal.

¹³⁵ Id.

¹³³ See Steven Gjerstad & Vernon L. Smith, *From Bubble to Depression?*, WALL ST. J., Apr. 6, 2009, at A15. *available at* LEXIS, News Library, WSJNL File (describing factors which led to the housing price bubble).

¹³⁴ Federal and State Enforcement of Financial Consumer and Investor Protection Laws: Hearings Before the H. Comm. on Financial Services, 111th Cong. 8 (2009) (testimony of Lisa Madigan, Illinois Attorney General).

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A. No or Low Documentation Loans

A primary method of degrading underwriting was the use of no or low documentation loans. Such loans were originally designed for wealthy borrowers who might not want to disclose their income but were considered safe borrowers. Fannie Mae and Freddie Mac had not required full documentation for borrowers they considered exceptionally secure.¹³⁶ The use of these loans spread dramatically once they entered the subprime market.¹³⁷ Instead of being aimed at wealthy, or very low-risk individuals, these loans became aggressively marketed to wage earners who should have received a W-2 form and could have documented at least some income.¹³⁸ While many low documentation loans were originally done because the lender decided that the borrower was an exceptionally low-risk borrower, as time went on, low documentation loans were requested by borrowers. "Borrower-directed" low documentation loans are inherently more risky than "lender-directed" low documentation loans, since the borrower may be requesting the lower level of documentation in order to hide fraud or misrepresentation.¹³⁹

Granting no documentation loans to W-2 wage earners is a questionable practice, as such borrowers should be able to document at least a portion of their income, and there appear to be only rare legitimate reasons why a lender would not want to be able to do so. At a minimum, lenders should have been required to conduct inquiries of borrower assets and income, or at least document the need or reasons for a no or low document loan. Even these minimal attempts were not taken in many cases, and lenders often made stated income loans when they were not reasonable or reasonably necessary.¹⁴⁰

Documentation of borrowers' assets and income has long been considered part of prudent underwriting. In the past, low documentation loans included at least some documentation of the borrowers' income, such as pay stubs. However, many of the low documentation programs did not require any proof of income.¹⁴¹ Many subprime automated underwriting systems analyzed low documentation loans based on the old, safer rules governing their use rather than the new, much more default-inducing rules. A lender-directed, high income borrower loan is much less prone to default than a borrower-directed loan where the borrower could have produced

¹³⁶ Gates et al., *supra* note 48, at 373 n.1.

¹³⁷ The Impact of Poor Underwriting Practices and Fraud in Subprime RMBS Performance, FITCH RATINGS, Nov. 28, 2007, at 6 [hereinafter Poor Underwriting Practices].

¹³⁸ Mark Adelson & David Jacob, *ABS/MBS Litigation Outlook*, ASSET SECURITIZATION REP., Nov. 19, 2007, at 1, *available at* LEXIS, News Library, ASTSRP File.

¹³⁹ Posting of "Tanta" (Doris Dungey) to CALCULATEDRISK.COM, http://www. calculatedriskblog.com/2007/03/ficos-and-aus-we-will-add-your.html (Mar. 19, 2007, 13:13 EST).

¹⁴¹ Drivers of 2006 Subprime Vintage Performance, FITCH RATINGS, Nov. 13, 2007, at 2.

two years of W-2s but chose not to. One of the savviest commenters on the subprime crash noted that underwriting systems based on the old rules

might allow some doc relief after the initial analysis is done, but they always start with the 'assumption' that any number you type in for income or assets is verifiable if not initially verified. That's a huge, important difference. . . A 'borrower-directed' low doc loan simply messes up the whole underlying assumption of verifiability. And, of course, a borrower-directed low or no doc loan is, as we've seen, probably (although not necessarily, of course) already 'gaming' the system: inflating the income or assets so that the DTI or reserve calculations come up with better results than they would have using verifiable numbers.¹⁴²

In 2006, one rating agency estimated that more than fifty percent of the subprime sector consisted of loans with less than full documentation.¹⁴³ A review of a large pool of loans found that "from 2001 to 2006, the share of fully documented subprime mortgages fell from 77.8 percent to 61.7 percent, while the share of fully documented alt-a mortgages fell from 36.8 percent to 18.9 percent."

These stated income loans were ripe for abuse, both by borrowers trying to obtain loans greater than their incomes would justify, and also for mortgage brokers and lenders who were inducing borrowers to obtain loans with payments larger than they could afford.¹⁴⁵ Low documentation loans allowed lenders to hide faulty underwriting.¹⁴⁶ Many loans were made to borrowers with no documented ability to repay them. These no document loans were known as NINJA loans, for borrowers who had no income, no job, and no assets.¹⁴⁷

One reason for the expanded popularity of no documentation loans was the greater payment to loan originators for such loans. Instead of being paid \$2,000 to \$4,000 for a traditional fixed-rate mortgage, a broker might make as much as \$15,000 for a no documentation loan of \$300,000.¹⁴⁸ For this reason, borrowers who could have documented their loans were often

¹⁴² Posting of "Tanta," supra note 139.

¹⁴³ U.S. Subprime RMBS in Structured Finance CDOs, FITCH REPORTS, 4 Aug. 21, 2006, available at www.fitchreports.com.

¹⁴⁴ Haughwout et al., *supra* note 66, at 12.

¹⁴⁵ Alan Zibel, "Liar loans" may Prolong Mortgage Crisis, SEATTLE TIMES, Aug. 24, 2008, at E2, available at LEXIS, News Library, SEATTM File.

¹⁴⁶ See ELLEN SCHOLOEMER ET AL., LOSING GROUND: FORECLOSURES IN THE SUBPRIME MARKET AND THEIR COST TO HOMEOWNERS 26–27 (2006), http://www.responsiblelending.org/pdfs/foreclosurepaper-report-2-17.pdf (last visited Feb. 18, 2009) (providing examples of poor underwriting methods).

¹⁴⁷ Jan Kregel, *Changes in the U.S. Financial System and the Subprime Crisis* 14 (Levy Econ. Inst. of Bard Coll., Working Paper No. 530, 2008), *available at* http://ssrn.com/abstract=1123937.

¹⁴⁸ Zibel, *supra* note 145, at E2.

induced into taking more expensive no documentation loans, which cost up to an extra one percent in interest. Many borrowers did not realize that they were paying extra for a privilege they might not have wanted, which could be used to justify giving them a loan they could not afford.¹⁴⁹

B. Inflated Housing Appraisals

Because of securitization, appraisers have been pressured by lenders and mortgage brokers to inflate the value of homes to be secured by loans. Lenders who hold their own loans would rarely want appraisers to overestimate the value of a house, since the equity in the home protects the lender if the borrower fails to repay the loan. However, with securitization an appraisal changes from a benefit allowing a lender to protect itself to a hurdle that the lender has to overcome in order to sell another mortgage to the secondary market. Lenders gain an incentive to game appraisals on loans they make, so that they can post attractive loan-to-value ratios on loans they wish to sell. They might also try to cut expenses by forgoing a full appraisal and merely use automated valuation models or broker price opinions instead.¹⁵⁰ Similarly, mortgage brokers eager to close loans have great reason to obtain inflated appraisals to justify high loan amounts, which can lead to a higher commission, and the lenders they work with have little incentive to check the validity of those appraisals.

To mitigate this conflict of interest, appraisers should not be directly hired or controlled by the loan officers or underwriters looking to get a loan closed. However, despite guidelines regarding appraiser independence, many banks have allowed their loan officers or underwriters to "manage the entire appraisal process from order to review," which some appraisers view as a prime cause for "the intense pressure on appraisers."¹⁵¹

On a widespread basis, appraisers have been notified of the amount of the appraisal they were expected to meet in order to justify the loan amount, and appraisers that failed to meet this appraisal amount could expect to lose business.¹⁵² Appraisers who refused to doctor their reports

¹⁴⁹ Ending Mortgage Abuse: Safeguarding Homebuyers: Hearing Before the Subcomm. on Housing, Transportation, and Community Development of the S. Comm. on Banking, Housing, and Urban Affairs, 110th Cong. (2007), available at http://banking.senate.gov/public/_files/calhoun1.pdf (statement of Michael D. Calhoun, President, Ctr. For Responsible Lending).

¹⁵⁰ Hearings Mortgage Lending Reform, supra note 4, at 12 (testimony of Jim Amorin, President of Appraisal Inst.).

¹⁵¹ Broken Dreams in the Poconos: The Response of the Secondary Markets and Implications for Federal Legislation: Hearings Before the H. Subcomm. on Capital Markets, Insurance and Government Sponsored Enterprises of the H. Comm. on Financial Services, 108th Cong. 11 (2004) (joint testimony presented by Gary P. Taylor, on behalf of Appraisal Inst.).

¹⁵² N.Y. COMM'N OF INVESTIGATION, A PERFECT STORM: EASY MONEY AND THE MORTGAGE MELTDOWN: THE SUBPRIME MORTGAGE CRISIS IN NEW YORK STATE 9–10 (2008), *available at* http://www.sic.state.ny.us/Docs/Public%20Reports/pdf/MortgageCrisis.pdf.

have been threatened to be put on a "blacklist" of appraisers excluded from work.¹⁵³ In 2001, a worldwide association of appraisers, the Appraisal Institute, informed Congress that its members were facing increasing pressures to inflate property appraisals, and a director at that institute stated that the pressure became even more intense during the early and mid-2000s.¹⁵⁴ One 2006 survey indicated that ninety percent of appraisers reported that they had been pressured to inflate the value of real estate, up from fifty-five percent in the previous 2003 survey.¹⁵⁵ In a review of a small sample of 2006 loans where there was an early default, despite the fact that many had strong credit characteristics, a rating agency discovered that more than half had appraisal problems, such as inaccurate appraisals, conflicting information, or items "outside of typically accepted parameters."156

There is too little regulation of appraisers. The Appraisal Subcommittee, an independent federal agency designed to ensure that states enforce rules governing appraisers, has no enforcement powers other than one it will not use, "non-recognition," meaning that all appraisers in that state would be banned from any transactions involving a federal agency. The Appraisal Subcommittee reported in 2006 that 60 percent of the state agencies regulating appraisals did not uphold their enforcement responsibilities.¹⁵⁷ As a result, many state investigations against appraisers, some involving fraud, lie dormant for years.¹⁵⁸

C. Occupancy and Property Ownership Misrepresentation

Lenders should naturally be interested in whether borrowers live or will live in the property secured by a loan, as subprime default rates are higher where the owner does not occupy the house.¹⁵⁹ Borrowers not living in the property have less incentive to maintain loan payments if the value of the property drops below the amount of the loan, especially if they are attempting to "flip" the property for a profit.¹⁶⁰ A significant

¹⁵³ Hearings Mortgage Lending Reform, supra note 4, at 9 (testimony of Jim Amorin, President of Appraisal Inst.). ¹⁵⁴ Bill Sizemore, Appraisers Feel Push to Overvalue Properties, VA. PILOT, Dec. 5, 2008, at

A15, available at LEXIS, News Library, VAPILT File.

⁵⁵ Kenneth R. Harney, Lawsuit Seeks to Deflate the Puffery in Appraisals, WASH. POST, Nov. 10, 2007, at F1, available at LEXIS, News Library, WPOST File.

⁶ Poor Underwriting Practices, supra note 137, at 1, 5.

¹⁵⁷ Hearings Mortgage Lending Reform, supra note 4, at 5 (testimony of Jim Amorin, President of Appraisal Inst.).

¹⁵⁸ Mitch Weiss, Appraisal Regulation 'Broken,' Former Fed Says, CHARLESTON GAZETTE (W.Va.), Aug. 18, 2008, at P2C, available at LEXIS, News Library, CHRGAZ File.

¹⁵⁹ Shane M. Sherlund, *The Past, Present, and Future of Subprime Mortgages* 10 (Fed. Reserve Bd. Finance and Economics Discussion Series 2008-63), available at http://www.federalreserve. gov/pubs/feds/2008/200863/200863pap.pdf.

¹⁶⁰ Subprime Collateral Trends and Early Payment Defaults, FITCH RATINGS, Apr. 27, 2007 at 1 [hereinafter Subprime Collateral Trends].

component of the rise in recent defaults has been the number of borrowers who were speculating on housing value increases, hoping to flip properties for a profit. Borrowers' credit can look better if they hide the fact that they own several other properties and so have a debt load larger than their income can maintain.¹⁶¹ Therefore, misrepresenting that they will live in the house subject to the mortgage will make the loan seem more secure than it is. A rating agency review of a small sample of 2006 loans with early payment default found that 66% of the loans had some form of "occupancy fraud."¹⁶²

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D. FICO Score Problems

With the advent of securitization, credit scores assumed increasing and even dominant importance, as they and loan-to-value ratios are the most salient objective pieces of information that can be verified and relied on by the secondary market. Economists attempting to discern whether underwriting standards fell also rely on FICO scores to examine underwriting standards. However, FICO scores have not been a stable indication of the likelihood of subprime mortgage default, and high FICO scores in particular have become less reliable. The delinquency rate of subprime borrowers with high FICO scores increased more than those with low FICO scores between 2005 and 2007. The serious delinquency rate of borrowers with FICO scores between 500 and 600 doubled from 2005 to 2007, but almost guadrupled for subprime borrowers with FICO scores above 700. In fact, the rate of serious delinquency for the best-FICO group in 2007 was almost as high as the worst FICO group in 2005.¹⁶³ There is additional anecdotal evidence and industry sentiment that credit scores were not a stable indicator of borrower credit-worthiness from one borrower to the next, or from one year to the next.¹⁶⁴

One problem with credit scores is that whether borrowers with a particular credit score are likely to default depends to a large extent on factors other than the credit score. For example, a study conducted by Fair Isaac along with a bond rating agency found that borrowers with high credit scores who put no money down are as likely to default as borrowers who score lower but make a forty percent down payment. Even portfolios with identical FICO scores can vary dramatically in their default rates, depending on the strength of underwriting conducted by the originators.¹⁶⁵

¹⁶¹ Bonnie Sinnock, Misrepresentations Usually Presage Loan Defaults, 7/1/08 Mortgage Servicing News 22, 2008 WLNR 12725533.

¹⁶² Poor Underwriting Practices, supra note 137, at 5.

¹⁶³ Yuliya Demyanyk, *Did Credit Scores Predict the Subprime Crisis?*, REGIONAL ECONOMIST, Oct. 2008, *available at* http://stlouisfed.org/publications/re/2008/d/pages/mortgage.html.

¹⁶⁴ Investors Question Rising Credit Scores, NAT'L MORTGAGE NEWS, Apr. 9, 2007, at 9, available at LEXIS, News Library, NMN File.

¹⁶⁵ Michael Maiello, Where Was FICO?, FORBES, Sept. 17, 2007, at 44, available at LEXIS,

Credit scores also are designed to predict behavior for a two-year period and are not as effective for predicting behavior for longer periods, a significant problem for home loans.¹⁶⁶ Investors and rating agencies that designed default models in an era of low securitization are likely to find that their models under-predict for defaults once securitization increases, and this effect appears to be much stronger for borrowers with low credit scores and low documentation of loans.¹⁶⁷ There has been a decline in the predictive powers of credit ratings for important aspects of creditworthiness. For example, one rating agency found that loans that defaulted early in 2003 had on average a thirty point lower FICO score than those that did not. By 2006, this spread had decreased to ten points. The same study found that loans with early payment defaults in 2006 had FICO scores on average thirty points higher than similar loans from 2003.¹⁶⁸

Some have asserted that FICO scores became inflated during the subprime boom.¹⁶⁹ Also, there has been significant effort by some consumers to game the credit scoring system in order to obtain inflated credit scores. For example, internet based companies have claimed the ability to increase a borrower's credit score artificially, through several methods. A common claim has been that, for a fee, companies would list borrowers as an "authorized user" for existing credit cards of third parties with high credit scores. Companies claim that they can increase borrowers' credit scores by 50 to 250 points or more with this method.¹⁷⁰ One rating agency, in reviewing loans for borrowers with FICO scores of 686, found that sixteen percent of the borrowers had employed the "authorized user" tool.¹⁷¹ In analyzing a sample of loans with early payment default, a rating agency found that the "loan files of borrowers with very high FICO scores showed little evidence of a sound credit history but rather the borrowers appeared as 'authorized' users of someone else's credit."¹⁷² Other schemes abound. One company claims that it can increase credit scores by adding new borrowers' names to dormant, paidoff loans in a third party's name, so that the new borrowers are given credit for the paid off loan.¹⁷³ Another tactic is for a "credit doctor" to issue a

News Library, FORBES File.

¹⁶⁶ Rajan et al., *supra* note 78, at 11.

¹⁶⁷ Id. at 27-28.

¹⁶⁸ Subprime Collateral Trends, supra note 160, at 1.

¹⁶⁹ Investors Question Rising Credit Scores, NAT'L MORTGAGE NEWS, Apr. 9, 2007, at 9, available at LEXIS, News Library, NMN File.

¹⁷⁰ Kenneth Harney, *Credit Scores for Sale*, WASH. POST, Apr. 7, 2007, at F1, *available at* LEXIS, News Library, WPOST File.

¹⁷¹ Dean Foust & Aaron Pressman, *Credit Scores: Not-So-Magic Numbers*, BUS. WK., Feb. 18, 2008, at 38.

¹⁷² Poor Underwriting Practices, supra note 137, at 2.

¹⁷³ Kathy M. Kristof, Offer: Lousy Credit? Buy Somebody Else's, L.A. TIMES, Dec. 8, 2007, at C4, available at LEXIS, News Library, LAT File.

credit account to potential borrowers, with a high credit limit but low credit balance, but at the same time prevent the potential borrower from using the credit. In that way, credit agencies perceive that borrowers have a low balance to credit limit ratio.¹⁷⁴

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Lenders also weakened the effect of FICO scores by failing to conduct due diligence in the face of information that should have led them to question those scores. For example, there often was no investigation of derogatories that appeared on credit reports, or even of fraud alerts. Lenders did not follow up where there was evidence that a borrower was using or had used an alias or the wrong social security number.¹⁷⁵

E. Underwriting for Teaser Rate

A significant failure in underwriting was lenders' willingness to underwrite loans for the teaser rate in 2/28s or 3/27s or payment option loans, even though the borrower would quickly finish the teaser portion of the loan and have to pay the full amount.¹⁷⁶ Failing to underwrite for the full amount set up borrowers for payment reset shock, as they would not have enough income to make their payments.¹⁷⁷ Furthermore, underwriting for the teaser rate enabled lenders to trick borrowers into taking out loans that they could not afford, as the lender or broker would attempt to convince the borrower that the teaser rate was the full, fixed rate for the loan. Many borrowers have been surprised when the fixed portion of their hybrid ARM ended, as they were led to believe that they had secured a fixed rate loan.

Failing to underwrite for the fully amortized rate allowed lenders to deceive both ends of the mortgage chain, to the lenders' advantage. They could convince borrowers to take out loans that the borrowers ultimately could not afford, by convincing borrowers that the initial teaser rate was the only rate about which the borrowers had to worry. And the lenders could deceive investors by failing to adequately inform them that the loans had been underwritten only to the teaser amount, concealing from investors the increased likelihood of default that the hybrid ARMs held.

F. "Risk Layering"

Originators added to their underwriting problems by engaging in "risk layering," where they would allow a single loan to have multiple risky

¹⁷⁴ Foust & Pressman, *supra* note 171, at 38.

¹⁷⁵ Poor Underwriting Practices, supra note 137, at 4–5.

¹⁷⁶ SENIOR SUPERVISORS GROUP, OBSERVATIONS ON RISK MANAGEMENT PRACTICES DURING THE RECENT MARKET TURBULENCE 18 (2008), *available at* http://www.newyorkfed.org/newsevents/ news/banking/2008/ssg_risk_mgt_doc_final.pdf.

¹⁷⁷ Sandler, *supra* note 74, at 3.

attributes.¹⁷⁸ A single loan might have low documentation and a simultaneous second lien, be made to a first-time home buyer with a low FICO score, and allow for negative amortization. Risk layering increased between 2001 and 2006: "In particular, loans with incomplete documentation and high leverage had an especially notable rise, increasing from essentially zero in 2001 to almost 20 percent of subprime originations by the end of 2006."¹⁷⁹ Each of these risks by itself may be somewhat difficult to quantify. However, the layering of such multiple risks makes the analysis of risk that much more difficult. There has been little history of default outcomes for this layering of risk, and at best underwriters could only guess at the effect of such multiple risk elements. As an analyst from a rating agency noted, "This 'perfect storm' of risk layering in underwriting subprime mortgages is unprecedented."180

VIII. SECURITIZATION'S EFFECTS ON ORIGINATORS

Many have pointed to the "originate to distribute" model of lending as a primary cause of the subprime meltdown.¹⁸¹ Under this critique, originators that are able to pass off the risk of default to investors by securitizing loans cease to screen effectively for that risk, since they no longer bear it. Lenders would be unwilling to spend money for screening that does not benefit them unless forced to do so by the purchasers of loans. Because the secondary market can only verify hard information, lenders give up soft mortgage underwriting and focus almost exclusively on the hard numbers, such as FICO scores and LTV ratios, that can be verified by the secondary market.

Lenders were often supposed to retain some residual risk by owning the most junior classes of securities (often unrated) created by securitizing their loans. In this way it was thought lenders would have an interest in loan quality since their interests would be wiped out first by loan defaults. However, once lenders found that hedge funds and securitizers of CDOs were willing to buy these junior tranches, they could escape even this residual risk and dramatically increase the moral hazard that investors faced.¹⁸²

Securitization also affects subprime lenders in other significant ways. The source of funding that securitization provides—money from investors in capital markets-is much less stable than other sources of funds used for

¹⁷⁸ Kristopher S. Gerardi et al., Making Sense of the Subprime Crisis 13 (Federal Reserve Bank of Atlanta, Working Paper 2009-2), *available at* http://ssrn.com/abstract=1338544. ¹⁷⁹ Id. at 14.

¹⁸⁰ Victoria Wagner, A Primer for the Subprime Problem, BUSINESS WEEK, Mar. 13, 2007, available at http://www.businessweek.com/investor/content/mar2007/pi20070313 837773.htm.

For one example among many, see Kiff & Mills, supra note 31, at 45 (explaining some of the deficiencies of the "originate-to-distribute" model).

¹⁸² Engel & McCoy, *supra* note 30, at 2067–68.

lending. Financial institutions that lend out money received from depositors have a fairly stable supply of money, so long as the depositors stay with the bank and there is no run on the bank-a hazard normally prevented by deposit insurance—and so long as the Fed keeps its interest rates below any mandated ceilings on deposit rates.¹⁸³ Depository institutions may have trouble retaining deposits when interest rates peak, as investors may remove their funds to place them in higher interest assets unless the depository institution raises its rates. This can be problematic for banks that have lent their deposits out for long-term fixed rate loans. However, banks have controlled this problem to some extent by switching to adjustable rate mortgages for their borrowers, so that their loan rates increase along with their deposit rates as interest rates generally rise.¹⁸⁴ Relying on deposits for their liquidity has also prevented banks from growing rapidly and, along with the Fed monetary policy, has traditionally acted as a damper on runaway speculative real estate booms.¹⁸⁵

Non-depository subprime lenders traditionally had greater difficulty in obtaining funds than banks, and therefore had stability of a different kind, in that while they often had little money to lend, they almost never had access to enormous sums. Before securitization, subprime lenders often had more potential borrowers than they had funds to lend, and had to work to find buyers for their loans. One subprime lender, for example, sold its loans individually to doctors and dentists as investments.¹⁸⁶

With securitization, however, subprime lenders found that they could attach themselves to a great spigot of funds, one that seemed almost endless during boom times, but one that they knew could be switched off at any time. As subprime lenders found out during the late 1990s, external market shocks could cut off their access to capital markets and prevent them from securitizing their loans, cutting off their source of funding.¹⁸⁷

A substantial portion of subprime lenders originated in the same area, in or around Orange County, California, and many subprime executives had worked together at earlier subprime lenders stretching back into the 1990s.¹⁸⁸ From this experience, the principals who managed subprime lenders learned two primary lessons, one cautionary, the other the opposite of cautionary. The cautionary lesson subprime lenders learned is how quickly the spigot of subprime lending could be turned off, even for reasons having nothing to do with the lender itself. In 1998, the Russian

¹⁸³ Wray, *supra* note 27, at 12.

¹⁸⁴ GRANT S. NELSON & DALE A. WHITMAN, REAL ESTATE FINANCE LAW 804 (3d ed. 1994).

¹⁸⁵ Wray, *supra* note 27, at 12.

¹⁸⁶ PAUL MUOLO & MATHEW PADILLA, CHAIN OF BLAME: HOW WALL STREET CAUSED THE MORTGAGE AND CREDIT CRISIS 39 (2008).

¹⁸⁷ Mason & Rosner, *supra* note 37, at 58.

¹⁸⁸ John Gittelsohn, *How Subprime Started in Orange County, Calif.*, ORANGE COUNTY REG. (Cal.), Dec. 30, 2007, *available at* LEXIS, News Library, MCTBUS File.

debt crisis, along with the related collapse of the private hedge fund, Long-Term Capital Management (LTCM), caused investors to engage in a rush to safety, abandoning securities issued by subprime lenders for the haven of U.S. Treasury securities.¹⁸⁹ While subprime lenders had also suffered unexpectedly high prepayment rates, and lenders had been playing accounting games by accounting for gains they had not yet realized, the investors seem to have been acting to a significant extent for reasons external to the subprime market.¹⁹⁰ With less investment interest in subprime-backed securities, subprime lenders' cost of funds increased, and they received less money for loans already in the pipeline, dealing them a double blow.¹⁹¹ Lenders had also tried to hedge against falling interest rates through Treasury bills, but with the flight to quality, the value of Treasury bills increased.¹⁹² Wall Street firms rethought their loans to the subprime lenders.¹⁹³ The stock values of subprime lenders plummeted, with some dropping to zero.¹⁹⁴ The market was littered with fallen subprime lenders that had depended on securitization, including many of the biggest names in subprime.¹⁹⁵

Managers of subprime lenders learned how easily and quickly their access to funds could be cut and their businesses could go under if they depended on securitization, even if they attempted to make good loans. The subprime loan business is not just subject to normal business cycles when built on securitization. Securitization exaggerates subprime business cycles and turns what might be relatively minor downturns into busts. Subprime lenders that "suffer even modest losses . . . may trip financial triggers in their warehouse borrowing documents (or other financial contracts) that, if not waived, might cause other contracts to cross-default, leading to the potential of being unable to continue in business."¹⁹⁶

The second lesson subprime originators learned came from the example set by First Alliance (FAMCO), a subprime mortgage giant headquartered in Orange County that in the late 1990s symbolized abusive lending practices. FAMCO was founded in 1971 by Brian Chisick and his

¹⁸⁹ Faten Sabry & Thomas Schopflocher, *The Subprime Meltdown: Not Again!*, AM. BANKR. INST. J., Sept. 2007, at 1, 1.

¹⁹⁶ See Danis & Pennington-Cross, *supra* note 51, at 5 (noting that "the Russian bond crisis during late 1998 caused investor confidence to decline").

¹⁹¹ Sabry & Schopflocher, *supra* note 189, at 1, 42.

¹⁹² Brenda B. White, A Short History of Subprime, MORTGAGE BANKING, Mar. 2006, at 17, 18.

¹⁹³ See MUOLO & PADILLA, *supra* note 186, at 44 (2008) ("Between the Russian debt crisis and the collapse of LTCM, some Wall Street firms grew skittish and began cutting back on how much money they would lend to subprime nonbanks.").

¹⁹⁴ *Id.* at 44–45.

¹⁹⁵ See White, supra note 192, at 17–18 (discussing major consumer finance companies that were forced into bankruptcy).

¹⁹⁶ Ellen R. Marshall, *Repurchase Demands on the Rise-But Why?*, MORTGAGE BANKING, May 1, 2007, at 56.

wife, Sarah, and for many years was a small consumer finance lender.¹⁹⁷ In the early years, for FAMCO to sell its loans, Chisick had to buy lists of potential investors, and then call them each individually to try to persuade them to purchase the loans.¹⁹⁸ FAMCO began securitizing loans in 1992, and this access to the capital markets for funding changed and expanded the company dramatically. In one year, its origination quadrupled, from \$100 million to \$400 million.¹⁹⁹ FAMCO's retail loan origination increased rapidly at thirty-one percent per annum, so that by 1997 what had once been a small consumer finance company had originated over \$1 billion in residential loans.²⁰⁰ The Chisicks' wealth increased dramatically as well,²⁰¹ and in 1996 the Chisicks reportedly sold \$135 million in stock.²⁰²

While it expanded, FAMCO was widely accused of misrepresenting the amount of fees that it would charge borrowers and the amounts of the loans that would encumber their houses. Using its allegedly deceptive methods, FAMCO was able to charge loan fees of up to twenty-three percent, much higher than the industry standard five percent, and it charged high fees whether borrowers had good or bad credit.²⁰³ A Florida assistant attorney general noted that FAMCO's fees were "just so excessively high that it's hard for me to conceive of any way a consumer would agree to that kind of loan if all the facts have been put before them."²⁰⁴

As a result of its lending practices, FAMCO became one of the most vilified and investigated subprime lenders of its day. It became the target of investigations by the U.S. Justice Department as well as by seven states' attorneys general. There were also numerous class actions and civil lawsuits brought, including those filed by the states of Minnesota, Massachusetts, and Illinois, alleging borrower deception.²⁰⁵

¹⁹⁷ Diana B. Henriques & Lowell Bergman, *Mortgaged Lives: A Special Report*, N.Y. TIMES, Mar. 15, 2000, at A1, *available at* LEXIS, News Library, NYT File.

¹⁹⁸ See Sinclair Stewart & Paul Waldie, *How It All Began*, GLOBE & MAIL (Canada), Dec. 20, 2008, at B1, *available at* LEXIS, News Library, GLOBML File (describing FAMCO's origin and rise to prominence).

¹⁹⁹ Edward Kulkosky, *Q* & *A: Self-Securitization Eases a Switch to Adjustables*, AM. BANKER, Nov. 24, 1993, at 10, *available at* LEXIS, News Library, AMBNKR File; *Low-Grade ARMs Attracting Lenders*, MORTGAGE MARKETPLACE, Nov. 22, 1993, at 10, *available at* LEXIS, News Library, ALLNWS File.

²⁰⁰ First Alliance Opens MA Branch Office, ORIGINATION NEWS, Apr. 1997, at 25.

²⁰¹ Stewart & Waldie, *supra* note 198.

²⁰² Diana B. Henriques, *Troubled Lender Seeks Protection*, N.Y. TIMES, Mar. 24, 2000, at A1, *available at* LEXIS, News Library, NYT File.

²⁰³ Henriques & Bergman, *supra* note 197; Kathryn Tong, *Crackdown on Subprime Lenders State, Activists Take Aim at Abusive Practices*, BOSTON GLOBE, Aug. 13, 2000, at H1, *available at* LEXIS, News Library, BGLOBE File (citing Pam Kogut, a Massachusetts assistant attorney general).

²⁰⁴ Henriques & Bergman, *supra* note 197.

²⁰⁵ Neal Gendler, Mortgage Firm's Legal Problems Add Up: Minnesota, Other States Targeting First Alliance, STAR TRIB., Dec. 2, 1998, at 2B, available at LEXIS, News Library, STRIB File.

Despite these lawsuits and investigations, FAMCO forged ahead. It continued to securitize its loans and managed to have some of the securities backed by AAA-rated loans. Only after an investigatory report in the *New York Times* and ABC's *20/20* revealed FAMCO's abusive lending to the general public and to the plaintiffs' bar at large did FAMCO declare bankruptcy. Six months after FAMCO declared bankruptcy, the Federal Trade Commission sued FAMCO and the Chisicks based on allegations that they had violated both federal and state laws in their lending operations from 1992 to 2000.²⁰⁶

The bankruptcy process, however, was good to FAMCO's founders. With the cases against it consolidated, FAMCO and its founders were able to enter into one global settlement, with the Chisicks paying \$20 million and an additional \$55 million coming from FAMCO.²⁰⁷ The Chisicks could well afford their share as Mr. Chisick had reportedly received over \$100 million over four years in total compensation, including stock sales, from FAMCO.²⁰⁸ The investors in FAMCO's abusive loans paid nothing. The Chisicks emerged from the settlement with enough money to purchase the residual income stream flowing from some of FAMCO's loans for about \$25 million.²⁰⁹

Lehman Brothers, an investment house, was also sued for providing a warehouse line of credit and for participating in securitizing FAMCO's loans. The suit against Lehman was closely watched to see if secondary market participants could be held liable for enabling subprime lenders' abusive lending. At the trial court, Lehman was held liable, though the jury found that it was only ten percent liable for the damage caused by FAMCO, and so found damages of only \$5.1 million against Lehman.²¹⁰ The Ninth Circuit Court of Appeals, however, vacated the damages award and "remand[ed] for further proceedings on the proper calculation of 'out-of-pocket' damages caused by First Alliance's fraudulent lending scheme, to be proportionately attributed to Lehman [Brothers]."²¹¹ Lehman also settled a case that had been filed against it by the State of Florida for only \$400,000.

FAMCO's demise should have been a model "worst case scenario" for

²⁰⁶ Kenneth R. Harney, *First Alliance Mortgage Settles "Predatory Lending" Charges For Up To \$60 Million*, REALTY TIMES, Mar. 22, 2002, http://realtytimes.com/rtpages/20020322_firstalliance.htm (last visited Feb. 20, 2009).

²⁰⁷ E. Scott Reckard, *First Alliance's Liquidation OKd*, L.A. TIMES, Sept. 11, 2002, (Business), at 1, *available at* LEXIS, News Library, LAT File.

²⁰⁸ Sinclair Stewart & Paul Waldie, *Lehman's Rise And Fall*, GLOBE & MAIL (Toronto Can.), Dec. 22, 2009, at B1.

²⁰⁹ James B. Kelleher, *Irvine, Calif.-Based Mortgage Lender's Founder Can Return to Business*, ORANGE COUNTY REG., Mar. 22, 2002, *available at* LEXIS, News Library, MCTBUS File.

²¹⁰ Brian Collins, *Warehouse Lenders Responsible for Clients' Fraud*, ORIGINATION NEWS, Jan. 2007, at 34, *available at* LEXIS, News Library, ORIGNW File.

²¹¹ In re First Alliance Mortgage Co., 471 F.3d 977, 1010 (9th Cir. 2006).

abusive subprime lenders, the investment houses that securitized their loans, and the investors who purchased the loans. With numerous victims, the Justice Department, and a number of attorneys general breathing down FAMCO's neck, multiple class action claims filed against it, and many private suits stacked on top of them, FAMCO, its owners, and its enablers should have paid heavily for FAMCO's misdeeds. What the subprime industry, investment houses, and investors discovered instead is that the worst case subprime scenario was not bad at all; the Chisicks emerged wealthy and free from prosecution, the investment house received a mere slap on the wrist, and the investors in the abusive loans got off virtually scot-free.

There were some larger settlements against subprime lenders, such as a Household Finance settlement in 2002 for \$484 million and a settlement by Ameriquest for \$325 million in 2006.²¹² Unfortunately, these were not sufficient, and, in the case of Ameriquest, were too late in the day to dissuade subprime lenders from engaging in abusive lending.

IX. SECURITIZATION'S EFFECT ON RATING AGENCIES AND INVESTMENT BANKS

The reputations of rating agencies and investment houses have suffered a tremendous blow as a result of the subprime meltdown. This loss of confidence occurred when many investors realized that they could no longer trust the ratings of the subprime backed securities that were being offered or the CDOs whose value depended on those securities, and when they recognized that investment houses packaged those loans without adequately protecting investors. The primary purpose of rating agencies is to assess the likelihood of timely payments to owners of securities, with a higher rating signaling a lower credit risk for those securities.²¹³ It appeared that rating agencies had dramatically underestimated the likelihood of default for pools of subprime loans, and the risk of loss in the resulting RMB and CDO securities. While rating agencies claim to be victims of misrepresentations by borrowers, bad underwriting, and flawed reporting by originators, their missteps and poor rating work can be attributed directly to the incentives rating agencies themselves had to overrate securities backed by subprime loans, incentives provided through the securitization process. Ratings agencies have not, until recently, been regulated in any significant way in the United States or any other nation that is a major financial center.²¹⁴

²¹² Eric Nalder, *Mortgage System Crumbled While Regulators Jousted*, SEATTLE POST-INTELLIGENCER, Oct. 11, 2008, at A1, *available at* LEXIS, News Library, SEAPIN File.

²¹³ Steven L. Schwarcz, *Private Ordering of Public Markets: The Rating Agency Paradox*, 2002 U. ILL, L. REV, 1, 7.

²¹⁴ David Reiss, Subprime Standardization: How Rating Agencies Allow Predatory Lending to

Rating agencies were necessary in the subprime market because of the securitization process and because the ultimate investors in the securities backed by subprime loans needed a trusted intermediary to provide evidence of value, given both the complexity of the securities and the difficulty in tracking information regarding the borrowers and securities represented by the myriad loans in the mortgage pools. For example, a single pool of loans might contain anywhere from one thousand to twenty-five thousand loans, depending on the type of loan pooled.²¹⁵ Also, investors were typically not given the loan-by-loan data they needed to fully evaluate the loans and resulting securities.²¹⁶ However, securitization also provided the means by which loan originators could induce rating agencies to overrate subprime loans, and the incentives for rating agencies to succumb to that inducement.

Rating agencies had an inherent conflict of interest in that, by and large, they were paid by the securities issuers that they were supposed to police rather than by the investors they were supposed to protect.²¹⁷ Worse yet, the issuers of securities could shop among the different rating agencies for the best set of ratings for tranches of securities for a given loan, and if a rating agency consistently provided better ratings than its competitors, it could gain valuable business. This resulted in a "race to the bottom" among the rating agencies on the stringency of their ratings.²¹⁸ Just as mortgage brokers were enticed to push loan amounts to the top margin of what automated underwriting programs would allow, so too lenders made more money if they pushed rating agencies to the bottom margins of what loan quality the raters would allow.

The greater the proportion of an offerings' securities a rating agency was willing to rate AAA, the more valuable those securities were, because investors would be willing to accept a lower level of return for more risk-free securities, in effect paying more for the higher rating.²¹⁹ Not only did issuers and underwriters shop for the best ratings, they also were not willing to pay for ratings not to their liking.²²⁰ Rating agencies found that the market not only did not reward high quality ratings, but instead punished them. As one rating agency internal memo stated, "The real problem is not that the market . . . underweights ratings quality but rather

Flourish in the Secondary Mortgage Market, 33 FLA. ST. U. L. REV. 985, 1013 (2006); Schwarcz, supra note 213, at 3-5.

²¹⁵ Financial Crisis Hearing, supra note 97 (statement of Frank L. Raiter), available at http://oversight.house.gov/documents/20081022102804.pdf.

²¹⁶ *Id.* (statement of Jerome S. Fons).

 $^{^{217}}$ Id.

²¹⁸ *Id*.

²¹⁹ Schwarcz, *supra* note 213, at 8.

²²⁰ FINANCIAL ECONOMISTS ROUNDTABLE, STATEMENT ON REFORMING THE ROLE OF THE STATISTICAL RATINGS ORGANIZATIONS IN THE SECURITIZATION PROCESS 5 (2008), *available at* http://fic.wharton.upenn.edu/fic/Policy%20page/FER12%201%2008rev.pdf.

that, in some sectors, it actually penalizes quality by awarding rating mandates based on the lowest credit enhancement needed for the highest rating."221

Credit enhancements, efforts to reduce risk to investors, can be expensive, as they can include "loan guarantees from an insurance company or similar guarantor" or "overcollateralization", where greater value of loans is put into the loan pool than is strictly necessary for the required income stream.²²² Rating agencies claimed to require credit enhancements designed to protect investors in the top rated securities even if there were catastrophic losses on the order of those that would occur with a return to the Great Depression.²²³ However, such claims were clearly exaggerated.

Issuers consulted rating agencies in creating the tranches of securities to be rated and issued, and the rating agencies advised on what credit enhancement or equity cushion would need to be included in order for the issuer to receive the desired ratings. Because issuers shopped for the highest ratings at the lowest cost, rating agencies that recommended the least expensive credit enhancement received the most business. This encouraged credit agencies to minimize the amount of required credit enhancement, perhaps justifying that decision with the short history of stability in the credit market.²²⁴

Issuers, however, went beyond mere shopping for better ratings. By complaining, large originators could reportedly induce rating agencies to increase ratings after they had rated an offering of subprime backed securities, even though the rating agency received no new information to justify a new rating. This indicates that the rating was based at least in part on demands by originators rather than solely on the quality of the loans securitized ²²⁵

That rating agencies were willing to rate securities backed by exotic loan products to begin with shows how willing rating agencies were to sacrifice rating quality in order to earn market share. A prime element of rating a security should be how well such a security has performed historically given various market conditions. However, rating agencies were willing to rate securities made up of new loan products for which there was no real historical record of default rates, and what little record

²²¹ Financial Crisis Hearing, supra note 97 (confidential presentation to Moody's Board of Directors), available at http://oversight.house.gov/documents/20081022111050.pdf. 222 Raymond H. Brescia, Capital In Chaos: The Subprime Mortgage Crisis And The Social

Capital Response, 56 CLEV, ST. L. REV, 271, 291 (2008).

²²³ Engel & McCoy, *supra* note 30, at 2047. Credit enhancements can be internal, involving overcollateralization of loans, or external, involving third parties such as monocline insurers or other entities. See Peterson, supra note 30, at 2205-06 (discussing various internal and external credit enhancements).

²²⁴ Kregel, *supra* note 147, at 16.

²²⁵ Morgenson, *supra* note 11.

there was occurred during a period of growing housing prices with few defaults.²²⁶ While there is significant academic research about default causation for more traditional products, only in the last year or two have economists turned significant attention to the default characteristics of the exotic loans that came to dominate the subprime market.²²⁷ Rating agencies should have acted as a necessary brake on the development of potentially risky mortgage products by refusing to rate them until they had demonstrated a track record showing that the likelihood of default was not excessive. Instead, rating agencies threw open the doors of securitization to these new loans with many layers of risk, and thereby supercharged their use by residential borrowers.

While rating agencies were pressured to lower the quality of their ratings, they in turn pressured state governments to lower the quality of consumer protection to be given borrowers. For example, when the State of Georgia enacted strong consumer protection of borrowers, including assignee liability, the rating agencies indicated to the Georgia legislature that they would not rate transactions subject to the law, thereby browbeating Georgia into amending that law.²²⁸ The rating agencies each issued reports detailing their criteria by which to rate transactions in the face of state anti-predatory lending laws, essentially attempting to create a ceiling for such borrower protection.²²⁹

Rating agencies made clear to investors that they did not perform due diligence or otherwise verify whether the loan data they relied on was accurate.²³⁰ However, the rating agencies did not inform investors of all of the rating criteria used to rate RMBS and CDOs.²³¹ Rating agencies also frequently tweaked the results of their loss models and substituted another loss level without a documented explanation. For example, one rating agency "regularly reduced loss expectations on subprime second lien mortgages from the loss expectations output by its RMBS model."²³²

Rating RMBS and CDOs was incredibly profitable for rating agencies. A rating agency could demand and receive \$200,000 to \$250,000 for its work rating a \$350 million mortgage pool, even though it might receive only \$50,000 to rate a similarly sized municipal bond.²³³ One rating

²³¹ *Id.* at 13.

 232 *Id.* at 14.

²²⁶ Kregel, *supra* note 147, at 88.

²²⁷ See Chomsisengphet et al., *supra* note 14, at 3–4 (describing several recent studies focusing on subprime market loans).

²²⁸ Reiss, *supra* note 214, at 1034–35.

 $^{^{229}}$ *Id.* at 1040 (noting that "[t]]hese reports put state legislatures on notice as to the privileged raters' requirements and effectively set a framework for standardizing predatory lending legislation that followed").

²³⁰ S.E.C., SUMMARY REPORT OF ISSUES IDENTIFIED IN THE COMMISSION STAFF'S EXAMINATIONS OF SELECT CREDIT RATING AGENCIES 18 (2008), *available at* httt://www.sec.gov/news/studies/2008/craexamination070808.pdf.

²³³ Morgenson, *supra* note 11.

agency alone reportedly took in about \$3 billion for its rating of loan and other debt pools from 2002 through 2006, and revenue of such structured finance rating made up almost half of its revenue for 2006.²³⁴ Rating agencies had extremely high profit margins, in some cases more than fifty percent.²³⁵

As a result of the competition in a tremendously profitable business, rating agencies underrated the risk of loss and default of the RMBS and CDOs they were rating. As one insider noted, their model did not capture half of the risk of a certain issuance, but they would rate it anyway, stating that the issuance "could be structured by cows and we would rate it."²³⁶

Rating agencies should have been constantly updating their default and prepayment models to reflect the new mortgage products and new conditions underlying the subprime market. However, because updating these models is an expensive process and rating agencies were increasingly focused on the bottom line, such updating could fall through the cracks. One former managing director of a rating agency reported in 2008 that his rating agency's last loss and default model update was implemented in late 1998 or early 1999, and that a subsequent, more powerful model was never implemented, to his knowledge, for budgetary reasons.²³⁷

Rating agencies also failed to re-rate past securities issues on a timely basis. Had they done so, the agencies and investors might have more quickly become aware of the decline in underwriting taking over the subprime market.²³⁸ However, because re-rating of securities was typically paid for up-front by the issuer, and because issuers were rarely eager to see the downgrades that regular re-rating might provide, ratings were normally not downgraded until well after investors could see that the ratings were too high.²³⁹ By comparison, rating agencies seemed more eager to re-rate when they could upgrade ratings. For example, in 2006, one rating agency reported that it upgraded its structured finance ratings 4.54 times as often as it downgraded them.²⁴⁰

Rating agencies were late to admit the severity of the default problem. As late as June 2007, one rating agency report stated that the mortgage "industry as a whole will be able to manage this more difficult operating environment over the intermediate term without ratings implications,

²³⁴ Aaron Lucchetti & Serena Ng, *Credit and Blame: How Rating Firms' Calls Fueled Subprime Mess*, WALL ST. J., Aug. 15, 2007, at A1, *available at* LEXIS, News Library, WSJNL File; *see also* Morgenson, *supra* note 11.

²³⁵ Morgenson, *supra* note 11.

²³⁶ *Financial Crisis Hearing, supra* note 97 (instant message conversation between Shannon Mooney and Ralul Dilip Shah).

²³⁷ Financial Crisis Hearing, supra note 97 (statement of Frank L. Raiter).

²³⁸ Id.

²³⁹ FINANCIAL ECONOMISTS ROUNDTABLE, *supra* note 220, at 5.

²⁴⁰ Fitch Ratings 1991–2007 Global Structured Finance Transition and Default Study, FITCH RATINGS, Apr. 18, 2008, at 2 [hereinafter Fitch Ratings].

although some companies may be better situated than others.²⁴¹ At the time, subprime loans comprised forty percent of all loans overdue or in foreclosure.²⁴² In 2007, rating agencies were finally forced to admit that their ratings for securities backed by subprime mortgage were too high. One rating agency reported that in 2007 it downgraded the ratings of about thirty percent of rated subprime mortgage-backed securities and nineteen percent of rated CDOs, and it issued more RMBS downgrades than it had in the previous ten years combined.²⁴³

Rating agencies could have insisted on being given the "due diligence" reports generated for the investment houses issuing securities, and then used the reports in their ratings. Instead, they did not request these easily obtainable reports and so failed to gain important information that could have made the rating process more accurate.²⁴⁴

Just as rating agencies were being pressured to reduce the quality of their ratings, so too were investment houses being pushed, perhaps willingly, to securitize loans with decreasing quality, without effectively alerting investors as to the decline in quality. One way that investment houses concealed the decline in quality, even from themselves, was by reducing the amount of due diligence done on their behalf in the examination of loan pools. Due diligence, which was conducted by separate specialty companies, was designed to ferret out loans that did not conform to the underwriting standards loan originators claimed to be using, failed to comply with applicable law, or had other problems with documentation.²⁴⁵ Loans with problems could be kicked back to the lenders, who might be forced to sell the loans for a discount, depending on the problem with the loan.²⁴⁶ Lenders disliked these kickbacks, which could cut significantly into their profitability, and so fought against them.

Shortly after 2000, a securities company might have ordered the review of twenty-five to forty percent of subprime loans to be assembled in a loan pool.²⁴⁷ By 2006, Wall Street firms had relaxed this due diligence considerably, and typically only ten percent of such loans were

²⁴¹ Across the Board, Delinquencies Are Up: An Analysis of U.S. Private Mortgage Insurance Exposure, FITCH RATINGS, June 5, 2007, at 1.

²⁴² Ted Cornwell, *B&C Accounts for 40% of Defaults*, MORTGAGE SERVICING NEWS, June 2007, at 1, *available at* LEXIS, News Library, MORTSN File.

²⁴³ *Fitch Ratings, supra* note 240, at 3–4.

²⁴⁴ *Financial Crisis Hearing, supra* note 97 (statement of Frank L. Raiter), *available at* http://oversight.house.gov/documents/20081022102804.pdf; Jenny Anderson & Vikas Bajaj, *Banks' Loan Data Probed*, TIMES UNION (Albany, N.Y.), Jan. 27, 2008, at A1, *available at* LEXIS, News Library, ATMSUN File.

²⁴⁵ Anderson & Bajaj, *supra* note 244.

 $^{^{246}}$ *Id.* (noting that "lenders wanted the due diligence to find fewer exception loans, which were sold at a discount").

²⁴⁷ E. Scott Reckard, Subprime Mortgage Watchdogs Kept on Leash, L.A. TIMES, Mar. 17, 2008, at C1.

reviewed.²⁴⁸ This lax diligence was confined to investment firms intent on securitizing the loans, however, and loan buyers who intended to retain the loans in their portfolios would normally have fifty to one hundred percent of such loans reviewed.²⁴⁹ Worse yet, the companies accused of performing the due diligence for Wall Street firms have themselves been accused of throwing away troublesome documents or changing documentation to hide difficult loans.²⁵⁰

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There was regular pressure by lenders on investment houses to decrease the amount of due diligence investment houses conducted on the loans they purchased and securitized.²⁵¹ Larger subprime lenders had a strong enough bargaining position with Wall Street that they could bargain down the due diligence of Wall Street firms.²⁵² Some subprime originators had so many Wall Street firms interested in acquiring their loans that they could insist that would-be purchasers agree to review only a fraction of the loans.²⁵³ Investment houses could have improved the work of rating agencies by consistently passing along to them the results of their due diligence efforts, but they failed to do so, and the rating agencies seem rarely to have requested them.²⁵⁴

X. HOW INVESTORS FAILED

The last line of defense against declining underwriting standards should have been those most affected by it after the subprime borrowers: the ultimate investors in the resulting loans. Many of these investors were highly sophisticated entities, and so the question arises why many of them continued to purchase securitized interests in loans that were dropping in quality. Investors acting rationally in their own self-interest should have been very concerned about the underwriting standards for loans that they purchased interests in, given that those underwriting standards are designed to regulate the default rates of the loans, and hence their profitability. Investors should have known that subprime loans were risky and that the subprime market was the breeding ground for abusive lending. Predatory lending had long been the subject of newspaper articles, regulatory investigation, and Congressional testimony. Still, investors seemed to swarm over securities backed by subprime loans, and there was often substantially more demand than availability for securities backed by

²⁴⁸ Id.

²⁴⁹ *Id.*

²⁵⁰ *Id.*

²⁵¹ Engel & McCoy, *supra* note 30, at 2070.

²⁵² Anderson & Bajaj, *supra* note 244.

²⁵³ MUOLO & PADILLA, *supra* note 186, at 229.

²⁵⁴ Id.

subprime loans.²⁵⁵

Investors were drawn to securities backed by subprime loans in large part because of the greater returns of these securities compared to other equally rated securities.²⁵⁶ Many institutional investors, including pension funds, can only purchase AAA-rated or investment grade assets, giving the value of such highly rated securities a rating premium.²⁵⁷ Securities backed by subprime loans also made up a significant and growing proportion of assets used to create structured finance (SF) collateralized debt obligations (CDOs). Of those SF CDOs that closed during the first six months of 2006, there was a sixty-four percent concentration in U.S. subprime-mortgage backed securities, an increase from the forty-eight percent concentration that was found during the first six months of the previous year.²⁵⁸ Investors were lured by the higher returns that CDOs offered compared to government or corporate bonds, especially pension funds, which needed higher yields to keep up with their obligations.²⁵⁹ Issuance of CDOs soared, growing from almost zero in 1995 to more than \$500 billion in 2006, with 2006 issuance about equal to the total of the three preceding years combined.²⁶⁰

In what seems an amazing statement given the subsequent subprime collapse, one rating agency noted the reasons for CDO concentration on subprime RMBS: "Subprime RMBS have remained a large component of SF CDO collateral for their relatively stable performance, strong issuance supply and attractive spreads compared with alternative SF investments such as credit cards, auto loans, commercial mortgage backed securities and prime RMBS."²⁶¹ The popularity of CDOs purchasing subprime backed securities propped up the values of those securities. As Wachter, Pavlov, and Pozsar note, "The CDO market was so strong, in fact, that it ended up driving demand for underlying mortgages in and of themselves. Consequently, prices of MBSs and mortgage loans remained extremely buoyant, cheating investors into a false sense of security, as underwriting standards were collapsing."²⁶²

Much of the RMBS packaged in CDOs were less than AAA-rated, however, which made the CDO structure unstable. It is estimated that in 2006, seventy to seventy-five percent of the RMBS held in CDOs were

²⁵⁵ See Engel & McCoy, supra note 30, at 2075 ("[T]he market for subprime RMBS suffers from excess demand.").

²⁵⁶ U.S. Subprime RMBS in Structured Finance CDOs, supra note 143.

²⁵⁷ Michel G. Crouhy et al., The Subprime Credit Crisis of 07 9 (July 9, 2008) (unpublished manuscript), *available at* http://ssrn.com/abstract=1112467.

²⁵⁸ U.S. Subprime RMBS in Structured Finance CDOs, supra note 143.

²⁵⁹ Susan Wachter et al., *Subprime Lending and Real Estate Markets* 5 (U. of Penn. Inst. for Law & Econ., Research Paper No. 08-35, 2008), *available at* http://ssrn.com/abstract=1319757.

²⁶⁰ Mason & Rosner, *supra* note 37, at 68.

²⁶¹ U.S. Subprime RMBS in Structured Finance CDOs, supra note 143.

²⁶² Wachter et al., *supra* note 254, at 5.

rated below AAA.²⁶³ Therefore, significant defaults in RMBS, by hitting the junior tranches of RMBS, would have a disastrous effect on the values of these CDOs; this effect would reverberate through the subprime industry, as CDOs were keeping up market prices for RMBS to a significant extent.

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The fact that so many of the subprime mortgages were repackaged in CDOs made it that much more difficult, if not impossible, for investors or rating agencies to track back to the underwriting of the loans that ultimately provided the value for the CDO securities. Instead of a package of loans that investors could conceivably examine, they instead had a package of securities each backed by a set of tranches of different pools of loans. Determining how much risk each loan provided and then how much interest the investor had in each loan would be a computational nightmare and likely impossible.²⁶⁴ As a result, many investors did not even do independent analysis or their own due diligence, but instead relied on the rating agencies' analysis.²⁶⁵ "[M]any investors, swept up in the euphoria of the moment, failed to pay close attention to what they were buying."266 Investors often had to make rapid decisions in order to purchase securities that were in such high demand, further discouraging them from engaging in extensive due diligence of their own.²⁶⁷

Investment houses should have been disclosing to investors the information that investors needed to rationally decide whether and on what terms to purchase the subprime mortgage backed securities. However, the disclosure given to investors fell far short of what it should have been. Not only did investment houses fail to report the results of their due diligence efforts to rating agencies, they also failed to report an accurate number of loans that were shoe-horned into loan pools by the use of exceptionsloans that did not fit the stated underwriting criteria of the loan originator.²⁶⁸ For example, one mortgage lender regularly used exceptions to increase borrowers' credit limits by fifteen percent more than its own underwriting criteria would have allowed.²⁶⁹ Instead of disclosing to investors how many loans were made pursuant to such exceptions, the prospectuses filed by investment banks typically used boiler-plate

²⁶³ Mason & Rosner, *supra* note 37, at 72 (citing MOODY'S, CDO ASSET EXPOSURE REPORT (2006)). ²⁶⁴ See id. at 65 (discussing "the opacity and heterogeneity of collateral in CDO pools").

²⁶⁵ Steven L. Schwarcz, Disclosure's Failure in the Subprime Mortgage Crisis, 2008 UTAH L. REV. (forthcoming 2008), available at http://ssrn.com/abstract=1113034.

Steven L. Schwarcz, Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown, 93 MINN. L. REV. 373, 382 (quoting Alan S. Blinder, Six Fingers of Blame in the Mortgage Mess, N.Y. TIMES, Sept. 30, 2007, § 3 (Business), at 4, available at LEXIS, News Library, NYT File).

²⁶⁷ Engel & McCoy, *supra* note 30, at 2068.

²⁶⁸ Mark Adelson & David Jacob, ABS/MBS Litigation Outlook, ASSET SECURITIZATION REP., Nov. 19, 2007.

²⁶⁹ Vikas Bajaj & Jenny Anderson, Inquiry Focuses on Withholding of Data on Loans, N.Y. TIMES, Jan. 12, 2008, at 1, available at LEXIS, News Library, NYT File.

language, such as that exceptions accounted for "substantial" or "significant" portions of the loans.²⁷⁰ Nor did they disclose whether the use of exceptions was increasing, which it appears to have been at least since 2005.²⁷¹ While investment houses could have kicked back exceptions and forced originators to hold them in their portfolios, it appears that instead they may have purchased them at a discount and then included them in loan pools without fully notifying investors of the resulting decrease in the quality of the pool.²⁷² If so, this would be a profitable exercise for investment houses, because they would be able to sell bargain loans at full price. In some loan portfolios, exceptions have been estimated to make up fifty to eighty percent of the portfolio.²⁷³

The disclosures given to investors were inadequate given the complexity of those risks.²⁷⁴ To analyze the pool of loans, investors needed loan level detail regarding that pool, something they were rarely given. They should have been provided documentation regarding the due diligence performed by investment houses, which was also withheld from them. Additionally, investors should have been given the underwriting standards that were applied to the loans in the mortgage pool, the number of loans that were granted an exception from those standards, and also the policies that governed those exceptions. Investors may have been informed of the number of stated income loans in a pool, but typically they were not told that the character of the borrowers receiving stated income loans was changing, as those loans were being marketed to W-2 wage earners rather than the traditional wealthier borrowers who had received them in the past.²⁷⁵ Investors were not always adequately informed about borrowers' combined loan-to-value ratios, given the junior liens encumbering borrowers' homes, even though junior liens can significantly affect the default rate of senior loans, or whether the housing price information they were provided was based on a full appraisal or merely an automated appraisal.²⁷⁶ Investors were not given information that could have alerted them to the decline in underwriting that occurred in the subprime market in the years leading up to the subprime crisis, and so they kept investing in securities backed by those loans.²

²⁷³ Id.

²⁷⁰ Id.

²⁷¹ Adelson & Jacob, *supra* note 268; Jenny Anderson & Vikas Bajaj, *Banks' Loan Data Probed*, TIMES UNION (Albany, N.Y.), Jan. 27, 2008, at A1, *available at* LEXIS, News Library, ATMSUN File.

²⁷² Bajaj & Anderson, *supra* note 269.

²⁷⁴ See Schwarcz, supra note 213, at 2 (noting that "disclosure was insufficient, in part because complexity made the risks very difficult to understand").

²⁷⁵ Adelson & Jacob, *supra* note 268.

²⁷⁶ MUOLO & PADILLA, *supra* note 186, at 307 (2008).

²⁷⁷ See Kroszner, supra note 5 ("The paucity and inaccessibility of data about the underlying home loans was, in my opinion, one of the reasons that private-label MBS was able to expand so rapidly in 2005 and 2006 despite a deterioration in underwriting and prospective credit performance.").

Investors may have been comforted by the reassurance that securitization had built into it several protections for investors. One of these protections, the holder in due course rules, cuts off many defenses against the loans for borrowers as soon as a loan is transferred to a bona fide purchaser.²⁷⁸ Also, investors in senior tranches may have relied on the junior tranches taking the first losses. Investors were also typically protected by credit enhancements, such as overcollateralization or default insurance, provided to secure ratings, on the spread of risk among an entire pool of loans. Other safeguards built into securitization that supposedly reduced risk to investors included diversification in the loan pool regarding where the loans were originated, their credit risk or other characteristics, as well as deal provisions requiring originators to repurchase early defaults, make other representations and warranties, retain servicing rights, etc.²⁷⁹

Despite these protections, many investors—ironically like the subprime borrowers they hoped to profit from—were burned by engaging in financial transactions too risky and difficult to understand. Securitization took exotic subprime loans that are too unstable and complex for many borrowers to understand or use safely, and packaged these loans into securities that are, by their structure, excessively unstable and complex for most investors, multiplying the risk at both ends. Investors, like the borrowers, found that the disclosures given to them were inadequate to disclose those risks.

XI. PROFITABLE FAILURES

We are reaching the final chapter of the current round of subprime securitization. The Federal Reserve Board has finally issued rules mandating a few minimum underwriting standards for higher priced loans, requiring lenders to assess the borrowers' ability to repay such loans based on the highest scheduled payment during the loans' first seven years, as well as to verify income and assets, among other protections. All lenders are barred from pressuring appraisers to misstate home values.²⁸⁰ While these rules are a belated improvement, so far investors appear to consider them inadequate to protect them from faulty underwriting in the subprime market. Private label subprime securitization itself has largely shut down, and most originators have gone bankrupt or been closed by their parent organizations. Some argue that these bankruptcies are a form of market

 ²⁷⁸ For an extended discussion of the holder in due course doctrine and how it encourages abusive lending while protecting investors, see also Eggert, *supra* note 22.
²⁷⁹ For a more complete description of these mechanisms, see Kathleen C. Engel & Patricia A.

^{2/9} For a more complete description of these mechanisms, see Kathleen C. Engel & Patricia A. McCoy, *Turning a Blind Eye: Wall Street Finance of Predatory Lending*, 75 FORDHAM L. REV. 2039, 2054–65 (2007).

²⁸⁰ Fed. Reg. 44,189–44,197 (July 30, 2008). The new rules, for higher priced loans, also prohibit prepayment penalties, under certain conditions and mandate escrow of taxes and insurance for a year. For all loans, the rules also strengthened regulation of advertising and disclosure, among other things.

discipline and indicate that securitization does not reward bad behavior by originators. However, when the history of subprime securitization is written, it is important, as always, to follow the money and see how many fortunes were won during the subprime bubble, and what percentage of the winners of those fortunes were ever forced to give back any of that money to repay foreclosed or defrauded borrowers or duped investors.

During the subprime bubble, many long-time subprime insiders became very wealthy, even while new-comers suffered losses. How the long-time insiders did so can be seen in the story of one subprime lender, New Century Financial Corporation, headquartered, unsurprisingly, in Irvine, California, and which had the most noted subprime bankruptcy of 2007. New Century was founded in 1995 by a trio of former executives of another successful Orange County subprime lender. It relied almost entirely on brokers to sell its loans to borrowers, with ninety percent of its loans coming through its broker network, as of 2004.²⁸¹ New Century's great innovation was a computerized fast qualification system whereby brokers could go online and receive loan approval in twelve seconds, a program so popular with brokers that, in 2003, New Century was "getting 75% of its originations from brokers who use[d] the system."²⁸²

After weathering the Russian debt crisis, New Century grew quickly. In 2004, New Century went public and converted into a real estate investment trust (REIT), raising almost \$800 million.²⁸³ Rather than securitize its own loans, New Century sold many of them through whole loan sales to investment banks that would securitize them. New Century's loans were so popular for Wall Street securitizers that in 2006 it sold its output four months in advance and claimed to have received more than two percent over par for them.²⁸⁴

As early as 2004, New Century's executives knew or had many reasons to know that the loan quality of their company was "problematic," according to a bankruptcy examiner's report, and yet New Century did little about the poor quality of the underwriting.²⁸⁵ In the first quarter of 2004, about sixteen to twenty-one percent of loans included in an audit were found to have "moderate to high risk underwriting defects."²⁸⁶ Later that year, New Century's Quality Assurance Department stated, "[t]here

²⁸⁶ *Id.* at 145.

²⁸¹ Neil J. Morse, *Getting Good Results*, MORTGAGE BANKING, Sept. 2004, at 113, 113.

²⁸² Erick Bergquist, *No. 2 in Subprime, New Century Aims Even Higher*, AM. BANKER, Nov. 4, 2003, at 12, *available at* LEXIS, News Library, AMBNKR File.

²⁸³ Mathew Padilla, *New Century Readies to Go REIT*, ORANGE COUNTY BUS. J., Sept. 6, 2004, at 1.

²⁸⁴ Jody Shenn & Todd Davenport, *Pipeline*, 171 AM. BANKER, Mar. 23, 2006, at 11.

²⁸⁵ See In re New Century TRS Holdings, Inc., No. 07-10416, 2008 WL 850030, *109 (Bankr. D. Del. Feb. 29, 2008) (Final Report of Michael J. Missal, Bankr. Court Exam'r) (noting as a red flag: "[a]n increase in investor rejections of loans that New Century sought to sell (so-called 'kickouts' or 'fallouts'), beginning in 2003 and 2004").

has been a significant spike in the high-risk defect rates in our underwriting audit[s] in the last several months of the year," and by December, underwriting errors were reported in about twenty-four percent of the loans.²⁸⁷ Loan quality grew even worse in 2005, with much higher delinquency rates for many types of loans as compared to 2003 and 2004.²⁸⁸ Despite this decline in loan quality, senior management barely discussed loan quality in any formal meetings, and the limited effort to improve loan underwriting was resisted by senior management.²⁸⁹

The loan quality at New Century declined dramatically after 2005, with substantial increases in early defaults by borrowers and kickouts by loan purchasers, stacked on top of greater delinquency rates for 2005 and early 2006 New Century loans.²⁹⁰ While New Century did seem finally to make some efforts to improve loan quality in late 2006, by then it was too late.

New Century continued to churn out its low quality loans, with its loan origination volume increasing from \$14 billion in 2002 to \$60 billion only four years later.²⁹¹ Its founders became very wealthy. In 2005 alone, each of the founding trio earned \$1.6 million in salary plus bonuses, as well as over \$750,000 in stock; each sold over \$9.3 million in stock and earned millions more in dividends, with the dividends that two of the founders received totaling a combined \$17 million, according to reports.²⁹² New Century's chairman and co-founder retired as chairman at the end of 2006, right before the subprime market collapsed.²⁹³ The total remuneration received by the three executives over a four-year period before the subprime meltdown was reportedly \$74 million.²⁹⁴ In 2006, as the financial clouds grew darker over New Century, its three founders sold stock at a prolific rate, reportedly selling about \$29 million in shares while spending about \$5.4 million to buy shares at discounted rates.²⁹⁵

The executives appear to claim that they were following trading plans, designed to allow executives to sell shares in their own companies without

²⁹² MUOLO & PADILLA, *supra* note 186, at 166.

²⁹³ William Launder, *New Century Chairman Retiring*, AM. BANKER, Dec. 20, 2006, at 5, *available at LEXIS*, News Library, AMBNKR File.

²⁹⁴ Mark Maremont et al., *Before the Bust, These CEOs Took Money Off the Table*, WALL ST. J., Nov. 20, 2008, at A1, *available at* LEXIS, News Library, WSJNL File.

²⁸⁷ Id.

²⁸⁸ *Id.* at 148.

 $^{^{289}}$ See *id.* at 115 (finding that "New Century's Board and Senior Management may be criticized for their failures to identify loan quality as an item that needed far earlier and more focused attention and effort.").

²⁹⁰ See *id.* ("[V]irtually every monthly kickout report from mid-2004 onward stressed the need to get the kickout rates lower, but there was simply no meaningful action.").

²⁹¹ William M. VanDenburgh & Philip J. Harmelink, *Accounting Implications of the Subprime Meltdown: The Peril of Forgetting the Fundamentals*, CPA J. 24, 24–25 (Dec. 2008) (citing *In re* New Century TRS Holdings, Inc., No. 07-10416, 2008 WL 850030 (Bankr. D. Del. Feb. 29, 2008) (Final Report of Michael J. Missal, Bankr. Court Exam'r)).

²⁹⁵ MUOLO & PADILLA, *supra* note 186, at 175–76.

the appearance of inside trading by engaging in regular, pre-planned sales. The top executives of the company, however, reportedly adopted numerous new trading plans followed by quick stock sales during the last year of New Century's existence, and according to newspaper accounts "four executives sold nearly half a million shares from July to October 2006."²⁹⁶ One executive reportedly started a new trading plan in mid-November 2006 and sold nearly \$7.4 million in stock within days of adopting the new stock trading plan.²⁹⁷

New Century's collapse began with a February 2007 SEC filing in which the company said that the statements for three of the quarters in 2006 had to be restated because of failure to account properly for problematic loans; they later admitted to broader accounting irregularities.²⁹⁸ In March 2007, New Century reported that it expected it would report a loss for the entire year of 2006, in part because of loan loss reserves for which it should have accounted.²⁹⁹ All of New Century's warehouse lenders withdrew their funding or announced plans to do so.³⁰⁰ Purchasers of loans were demanding that New Century buy back \$9 billion in its own loans.³⁰¹ Faced with repurchase demands it could not satisfy and the pulling of its warehouse funding, New Century declared bankruptcy in April 2007.³⁰² As of September 2008, the FBI was reportedly investigating New Century, and in October 2008, a grand jury was investigating New Century and two other subprime lenders to see if mortgage fraud or other white-collar crimes had been committed.³⁰⁴

There is no doubt that in the insular world of Orange County subprime lenders the New Century founders were intimately familiar with the profitable fate of the owners of FAMCO, the most notorious predatory lender of the previous decade. As long as their loans were somewhat less predatory and somewhat less abusive than FAMCO's, the New Century principals had good reason to believe that, regardless of how shoddy their company's loan underwriting became and how many of their loans went into default and foreclosure, they could escape prosecution and retire with their wealth intact. New Century's loans reportedly "have some of the

²⁹⁶ William Heisel, *As Mortgages Soured, Executives Cashed Out*, L.A. TIMES, Nov. 26, 2008, at A1, *available at* LEXIS, News Library, LAT File.

²⁹⁷ Id.

²⁹⁸ Kate Berry, *New Century: New Errors, No Correction*, AM. BANKER, May 25, 2007, at 18, *available at* LEXIS, News Library, AMBNKR File.

²⁹⁹ MUOLO & PADILLA, supra note 186, at 175.

³⁰⁰ Harry Terris, New Century: All Warehouse Lenders Pulling Their Funds, AM. BANKER, Mar. 13, 2007, at 11, available at LEXIS, News Library, AMBNKR File.

³⁰¹ MUOLO & PADILLA, *supra* note 186, at 177.

³⁰² Id.

³⁰³ Barrie McKenna, *FBI Launches Probe Into Wall St. Meltdown*, GLOBE & MAIL (Canada), Sept. 24, 2008, at A1, *available at* LEXIS, News Library, GLOBML File.

³⁰⁴ Thomas Watkins, *Sub-prime Charges Await*, ADVERTISER (Australia), Oct. 18, 2008, at 91, *available at* LEXIS, News Library, ADVSUN File.

highest default rates in the industry -- almost twice those of competitors like Wells Fargo and Ameriquest, according to data from Moody's Investors Service."305

The New Century executives made only a pittance compared to some of the larger players in the subprime world. Angelo Mozilo, the CEO of Countrywide, which imploded as it was being taken over by Bank of America, reportedly cashed out \$478 million in stock from Countrywide, while its Chief Financial Officer sold an additional \$64 million in shares.³⁰⁶ Roland Arnall, the founder of Ameriquest, at one time "the nation's largest provider of sub-prime mortgages," was estimated to be worth almost two billion dollars in 2006.³⁰⁷

There is a good chance that the subprime lenders who churned out billions of dollars of bad loans will evade significant retribution. While the FBI and at least one grand jury is probing whether subprime lenders such as New Century committed fraud or other crimes, there are scant resources for the time-intensive investigation needed to prove such white collar crime.³⁰⁸ It is difficult enough to find institutions liable for faulty underwriting. Finding individual executives liable is much more difficult, as one must prove individual culpability and liability for corporate acts.³⁰⁹ If the executives who operated New Century and the other subprime lenders evade significant retribution, it will be an unfortunate lesson for the next generation of subprime lenders, whoever they might be and whenever they might emerge.

XII. CONCLUSION

Securitization has exposed its structural flaws in the course of the subprime meltdown. It has encouraged the creation of subprime lenders that ran roughshod over the financial industry and borrowers alike, cutting corners and degrading underwriting. Securitization made the entire financial system more fragile by undermining underwriting in the subprime and non-prime loans that coursed through the system. In addition, it also not only allowed but also encouraged each step of the lending and securitization process to be done at the margins, at the highest level of risk tolerance permitted. Securitization encouraged brokers and sales agents to push borrowers to borrow the maximum possible, pushing the envelope as to what the automated underwriting systems employed by brokers would

³⁰⁵Jenny Anderson & Vikas Bajaj, Wary of Risk, Bankers Sold Shaky Debt, N.Y. TIMES, Dec. 6, 2007, at 1, available at LEXIS, News Library, NYT File. ³⁰⁶ John Gittelsohn, Payback Time for Execs, ORANGE COUNTY REGISTER, Feb. 1, 2009.

³⁰⁷ L.A. 's Richest Got Richer Last Year, L.A. BUS. J., May 15, 2006, at 1.

³⁰⁸ Richard B. Schmitt, FBI Saw Threat of Loan Crisis, L.A. TIMES, Aug. 25, 2008, at 1, available at LEXIS, News Library, LAT File.

³⁰⁹ Hearings Before H. Comm. Financial Services, 111th Cong. (2009) (testimony of Lisa Madigan, Illinois Attorney General).

allow. Securitization also encouraged originators, rating agencies and investment houses to package those loans using the smallest level of credit enhancements the rating agencies would allow. By atomizing the mortgage process, securitization allowed originators to bargain down the quality standards of other market participants, including their due diligence in examining loans, the effectiveness of the rating agencies and the level of credit enhancements needed to create a large percentage of AAA-rated securities.

Securitizing subprime-backed securities into CDOs encouraged rating agencies and investment houses again to push the envelope, creating a large percentage of highly rated securities out of the riskier tranches of subprime backed securities. The riskier CDO tranches were again retranched to create new highly ranked securities. The result was an enormous volume of AAA-rated securities based on risky subprime and non-prime loans, with level after level of guidelines pushed to their maximum and beyond.

Once this house of cards was created, securitization amplified the effect of rising loan defaults. Because the subprime and near prime loans were packaged into securities, their default had a greater effect as investment grade securities lost that status, greatly damaging institutions with investment grades "hard-coded," requiring massive writedowns.

Securitization allowed subprime lenders to "profitably fail," so that their executives made millions originating risky loans before their companies folded. The post mortem on the subprime meltdown is not a mere exercise. Rules governing securitization must be designed with its structural flaws in mind. Furthermore, how regulators, the courts and prosecutors react to the meltdown and whether lenders and subprime executives who acted improperly are forced to disgorge their profits is a crucial issue, as it will determine—at least to some extent—how market participants act during the next bubble.