

Beyond “Skin in the Game”  
The Structural Flaws in Private-Label Mortgage  
Securitization That Caused the Mortgage Meltdown

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Prepared for the Financial Crisis Inquiry Commission for its Hearing entitled

“The Impact of the Financial Crisis at the Ground Level – Greater

Sacramento, California.”

Sacramento, California

September 23, 2010

## INTRODUCTION AND SUMMARY

The Financial Crisis Inquiry Commission is holding its hearings during a crucial moment, when the country is slowly recovering from what has been called the “Great Recession,” a severe economic downturn that was triggered in part because of the boom and then collapse of the subprime and non-prime mortgage market and the high numbers of mortgage defaults and foreclosures that the boom and bust left in their wake.<sup>1</sup> At the same time, Congress and federal regulators, along with the financial industry, are attempting to revive private-label mortgage securitization by establishing new rules of the road to govern that securitization.<sup>2</sup> The new Dodd-Frank bill takes basic steps to remake mortgage securitization and requires regulators to fill out the full set of rules with new regulations.

To create those new rules of the road, it is crucial to establish what went wrong under the previous system so that when private-label mortgage securitization recovers, we do not find ourselves heading for yet another crash. In my testimony, I will try to identify what I consider the primary causes of the subprime and non-prime mortgage boom and bust and what led to the high foreclosure and default rates.<sup>3</sup> In addition, given the location and purpose of these hearings, I will also describe why some California

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<sup>1</sup> “Subprime” generally refers to loans that carry higher interest rates and fees than the prime loans guaranteed by Fannie Mae and Freddie Mac. “Non-prime loans” are those that do not conform to the standards for agency loans guaranteed by Fannie and Freddie. “Non-prime” is a more inclusive term than subprime in that it includes not only subprime loans but also “Alt-A” loans, loans that may have near prime interest rates for borrowers with good credit, but have non-traditional characteristics, such as interest only or payment-option terms or reduced documentation.

<sup>2</sup> Private-label securitization is that done outside the auspices of government-sponsored entities (GSEs) such as Fannie and Freddie.

<sup>3</sup> This testimony is largely a distillation and update of my 2009 article *The Great Collapse: How Securitization Caused the Subprime Meltdown* (May 2009). *Connecticut Law Review*, Vol. 41, No. 4, 2009. SSRN: <http://ssrn.com/abstract=1434691>

communities were especially hard-hit by the subprime boom and bust and the resulting foreclosures.

Those analyzing the subprime crash and the accompanying defaults and foreclosures have converged on two main story lines to explain the flaws of securitization. The first is the idea that the “originate to distribute” model, where lenders originate loans intending immediately to sell or securitize them, misaligns the incentives of loan originators because by quickly assigning their loans, they no longer suffer from the results of loan defaults. Without ongoing “skin in the game,” the theory goes, lenders have little motivation to engage in careful underwriting to ensure their loans will not default.<sup>4</sup> The second dominant story line is that securitization’s problem was one of transparency: investors could not determine the risks of the securities created from subprime and non-prime loans, given the complexity of the resulting securities and the inadequate disclosures investors were given. Much of the proposed new regulation of private-label securitization is designed to solve these two problems.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 reflects these twin emphases. Its securitization reforms focus primarily on increased disclosure to investors and risk retention by originators and securitizers. Federal regulators who have already been moving forward with their own securitization reforms also focus on disclosure and risk retention. The Security and Exchange Commission’s proposed rules regarding securitization, which would revise Regulation AB and other

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<sup>4</sup> “Skin in the game” is the idea that investors can better trust the decisions of managers or others who stand personally to lose from bad decisions. Warren Buffett has been widely credited with coining the phrase “skin in the game.” See, e.g. [http://www.worldaffairsjournal.org/new/blogs/rieff/Skin\\_in\\_the\\_Game](http://www.worldaffairsjournal.org/new/blogs/rieff/Skin_in_the_Game). However, Buffett has indirectly denied that he coined the phrase and its usage seems significantly to predate Buffett himself. See Safire, William. 2006. “Language: Who's got a skin in the game?” *The New York Times*, September 17. <http://www.nytimes.com/2006/09/17/opinion/17iht-edsafire.2839605.html>

rules related to securitization, would also impose risk retention and much more disclosure, not only of the loans in the pool but also of the waterfall structure that determines which tranches receive money and when. The FDIC has also proposed new conditions for an FDIC-insured issuer to benefit from the FDIC’s securitization “safe harbor” rule. Use of that safe harbor shields an asset-backed securities issuer from the FDIC’s power following an issuer’s insolvency to recover assets that have been securitized. FDIC’s proposed rule includes risk retention and disclosure requirements, as well as other measures, for such safe harbor.

While the lack of “skin in the game” and of transparency are significant flaws in how private-label mortgage securitization has been conducted, it is important to recognize that they are not the only flaws, and that other aspects of securitization played a major factor in the subprime boom and bust.<sup>5</sup> Private-label mortgage securitization has been structured so that it encourages, at each stage of the origination and securitization of mortgages, market participants to push risk tolerance to its limits. It encourages brokers and lenders to make the largest and riskiest loans borrowers will sign and that can be securitized. Securitization rewards investment houses creating the riskiest loan pool that the rating agency would bless with high ratings, and then gives financial incentives to rating agencies to find some way to give high ratings to a large percentage of securities backed by the resulting risky loans.

Another flaw in private-label securitization is that its use has made it possible and lucrative for loan originators especially but also investment houses to bargain down the due diligence efforts of other securitization participants. Lenders have put great pressure

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<sup>5</sup> In this paper, my critique of securitization is limited to the private-label securitization of residential mortgage loans as it existed before the subprime collapse. Other forms of securitization, such as credit card securitization, are structured differently and so have different structural characteristics.

on appraisers to overstate the value of houses to justify loans and on investment houses to reduce their due diligence in examining loans in order to securitize them. Investment houses and others securitizers could shop among rating agencies to find the rating agency that would produce the best rating for securities while demanding the fewest potentially costly credit enhancements designed to protect investors from excessive loan defaults.

Securitization of non-prime loans also destabilizes the financial markets by being susceptible to an investor-driven boom and bust cycle. Notably, the recent subprime collapse was the second one that subprime securitization has experienced. The first subprime collapse occurred in the late 1990s and was largely driven by economic issues outside of the subprime market. This boom and bust cycle for mono-line subprime lenders encourages risk taking by those lenders because they can recognize that if securitization dries up, they may well be put out of business through no fault of their own. Therefore, during boom years subprime lenders have the economic incentive to make as many loans as they can, good or bad, as long as the loans can be securitized. Subprime lenders have little reason to be concerned about the long term reputational effect of making bad loans if they may soon be out of business regardless of the quality (or lack thereof) of the loans they make.

While the “originate to distribute” model explains that securitization undermined loan underwriting, it is important to recognize exactly how that underwriting was undermined. Securitization causes originators to focus on “hard” objective underwriting, underwriting that can be demonstrated and verified through the use of specific data points, such as the borrowers’ FICO scores, loan-to-value ratios, debt-to-income ratios, income and assets (Eggert, 2002). In focusing on these objective attributes, lenders

intending to securitize their loans have less cause to engage in “soft” underwriting, which examines borrowers’ credit-worthiness more subjectively, looking for evidence of borrowers’ ability and willingness to repay outside of the data points valued by securitization (Eggert, 2009). Analysis by economists indicates that much of the decline in underwriting after 2000 can be explained to the decline in “soft” underwriting.

In addition to creating the conditions for the making of risky and default-prone subprime and other non-prime loans, securitization amplified the effect of those defaults beyond the mere losses that the defaults themselves would otherwise have caused. If financial institutions had held individual loans, their losses would have been significant, but would have been more transparent to counterparties, investors, regulators and even the financial institutions themselves. Mortgage losses were amplified by counterparty risk, when other companies withheld credit because they could not accurately estimate the amount of subprime risk counterparties held. Had regulators realized the risk that federally-regulated financial institutions held, they should have demanded measures to counter or account for that risk. When the subprime collapse happened, no one knew which institutions were concealing subprime time-bombs on their books, and this lack of transparency of risk led to a severe credit crunch.

The tail end of securitization, the fact that loans are managed by servicers on behalf of the trusts that own loan pools, rather than by an individual owner, also contributes to the increased foreclosure rate, as servicers are more likely to foreclose and less likely to engage in meaningful loan modifications, than portfolio loan owners would be. In this way, securitization also amplifies the effects of loan defaults.

In the following testimony, I will first address why California has suffered so greatly from the subprime boom and bust. Then I will address each of these factors in greater detail. Those creating new rules of the road for private-label securitization should recognize the many factors that played a role in the subprime boom and bust, and not just focus on “skin in the game” and transparency.

### **CALIFORNIA AND THE SUBPRIME MARKET**

One troubling question for Californians is why California communities were among the worst affected nationally by the subprime boom and bust and so have suffered the most from the foreclosure and property value declines that result. A Forbes article from earlier this year identified Merced, California as the housing market in which median home prices dropped the most in the entire nation since the second quarter of 2006, falling an astonishing 62% from their high of about \$337,000 (Levy, 2010). In 2008, Mountain House, California, a planned city sixty miles east of San Francisco, was identified as the most “underwater” community in the country, with almost 90% of its home securing mortgages for more than the house was worth already by 2008 (Streitfeld, 2008).

The subprime boom and accompanying rise in property values was concentrated in the so-called “Sand States”: California, Nevada, Arizona, and Florida (Tracy, 2010). These states were ripe for housing booms for several reasons. They were subjects of higher than average immigration from other states, with Nevada, Arizona and Florida all recently in the top four “magnet states” with the highest percentage of current state residents born in another state (Cohn and Morin, 2008). Arizona and Nevada were the

fastest growing states from 2004 – 2007, with Florida not far behind, while in California, communities that would later be hit by subprime foreclosures, such as Riverside and San Bernardino, were also rapidly adding population (Olesiuk and Kalser, 2009). These states were magnet states because of their job growth, and they, as well as California exurbs, were ripe for development because of empty land and low building costs.

In California, the cities hardest hit by subprime loans were right outside of large population center: those in Riverside and San Bernardino counties for Los Angeles and communities like Fresno, Merced or Mountain Home near San Francisco (Mayer and Pence, 2008). These “exurbs” grew rapidly to accommodate would-be homeowners who could not afford houses in the cities. Once a housing boom started in these communities, the use of subprime loans pushed that boom into a bubble. Rapidly rising prices justified and covered up increasingly risky loans, as lenders required less and less money down based on anticipated valuation increases. Rising housing prices covered up a multitude of sins, and homeowners who got into trouble could typically sell their houses and pay off their loans, often reaping a profit. Cities with housing bubbles, such as Phoenix and Las Vegas, had greater percentages of loans that were subprime than expensive markets like Boston and San Francisco (8 and 12 percent in Phoenix compared to 3 and 4 percent for San Francisco and Boston, in 2005, for example) (Mayer, 2010).

California’s anti-predatory lending law did little to fend off abusive practices in the subprime market, as it contained only weak protection for residential borrowers. In 2001, California in 2001 enacted AB 489,<sup>6</sup> a bill purportedly designed to deter predatory lending. However, this law had numerous weaknesses. First of all, the protections only covered loans under \$250,000, an amount raised in 2006 to Fannie Mae’s limit for a

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<sup>6</sup> The bill AB 489 is embodied in Division 1.6 of the California Financial Code, Sections 4970 to 4979.8.



conforming single-family first mortgage. The law did little to restrict brokers from steering borrowers into higher priced loans, and explicitly exempted from liability assignees who are holders in due course. In other words, even when California’s law was violated, investors in the resulting mortgage-backed securities were by and large immune from suit by the borrower.

To make matters worse, California’s weak state law was held to preempt local law that might have provided homeowners with more protection from abusive lending. In the case, *Am. Fin. Servs. Ass’n v. City of Oakland*,<sup>7</sup> the California Supreme Court held that California’s weak state law preempted local ordinances, including Oakland’s much stronger local ordinance which would have covered more loans, mandated borrower counseling for high-cost loans, and provided liability to assignees of predatory loans, including those that had been securitized. Assignee liability is designed to force the secondary market to police originators in order to avoid liability for abusive lending (Eggert, 2002). California borrowers were left relatively unprotected as a result of the weak state law and its preemption of stronger local ordinances.

## **FACTORS IN THE SUBPRIME COLLAPSE:**

### **1. The “Originate to Distribute” Model**

Much has been made of the “Originate to Distribute” model of subprime lending. In 2002, I argued that subprime securitization weakens underwriting because lenders would be less concerned about whether loans would default, given that they planned quickly to sell them, and would only do the sort of automated, objective underwriting the results of which can be communicated to the secondary market (Eggert, 2002). It seems

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<sup>7</sup> *Am. Fin. Servs. Ass’n v. City of Oakland*, 104 P.3d 813, 828–29 (Cal. 2005).

clear that new regulations mandated by the Dodd-Frank bill and being considered by the SEC and the FDIC are designed to reduce the ills caused by the “originate to distribute” model. The law and likely regulations will fairly soon require originators to retain some “skin in the game” by holding 5 percent or so of the subprime securities backed by their loans, though the exact details will be determined by various federal regulators.

However, it would be a mistake to place too much confidence in the effect of such efforts. First of all, many subprime originators had so much “skin in the game” in terms of requirements that they repurchase early defaults or loans that violated their representations and warranties that they quickly went out of business once the loans went bad and they were asked to repurchase them. While their creditors would benefit if the monoline subprime originators had held more assets when they went bankrupt, the problem seems to have been one much larger than a mere 5 percent retention requirement would have solved.

Also, how the retention requirement should be structured is difficult to determine. If originators are required to retain the first loss position, they might well bank on the retained assets having so little value because of nearly inevitable losses that they should not affect the lenders’ behavior, especially that of abusive lenders with high default rates. The worse the lender, the less effect holding a 5 percent first loss position would have on that lender’s behavior. On the other hand, if originators were required to hold 5 percent scattered vertically among all of the tranches of a securitization, then they would face much lower losses even if there were significant default rates.

Nor is merely increasing the retention percentage without its own share of difficulty. If originators retain too great a percentage of securities in loans they originate,

they lose much of the advantages of securitization, as they would have less access to capital. Furthermore, originators who continue to service the loans they make would find themselves with a growing conflict of interest with the other investors, as the originators’ interest in how the loan is serviced increases.

Instead of accomplishing risk retention solely through forcing originators to hold mortgage-backed securities, it may be better to have them retain some risk by forcing them to hold loans in their portfolio for a period of time, say a year, before securitizing them. The FDIC had proposed such a one-year seasoning requirement but in its latest Notice of Proposed Rulemaking replaced the seasoning requirement with that of a “a 5% reserve fund for RMBS in order to cover potential put backs during the first year of the securitization.” (FDIC, 2010). Requiring seasoning would have some clear advantages over simply requiring retention of securities. First of all, seasoning would not lead to a conflict of interest between originators and investors, as the lenders would hold their own loans. Secondly, it would force lenders to bear all of the risk of early default, and would prevent them from securitizing a large number of bad loans and then declaring bankruptcy when the loans quickly go bad. Also, it would reduce the boom and bust cycle of subprime loans, as lenders who rapidly ramp up their subprime operations would have to hold the resulting loans for a year rather than quickly transferring them and immediately relending the money.

## **2. Lack of Transparency**

Critics have accurately condemned the lack of transparency that private-label mortgage-backed securitization, as it was structured, provided. Such securitization has created two kinds of opacity. First of all, investors were not given good information

about the risks contained in the securities they were purchasing. Secondly, by concealing those risks in securities with complex, opaque structures, the risks of which were again sliced and diced among CDOs, credit default swaps, insurance, repurchase agreements and other hedge attempts, securitization made opaque the subprime risk held by many different financial institutions.

For private-label securitizations, investors should have been given current loan-level detail for every security offering, so that they could see what they were buying, albeit with measures in place to protect borrower privacy. The value of mortgage-backed securities depends almost completely on the loans themselves, but investors were rarely given loan-level information. By failing to give investors loan level data, Wall Street firms were able to continue to securitize non-prime loans despite the deterioration of underwriting for those loans and their increased risk of default.<sup>8</sup> Worse yet, the prospectuses and accompanying supplement often made claims about the underwriting used for loan pools, but did not disclose how many of the loans included in the pools were made as exceptions to the underwriting standards. Instead, the offering materials reported mere boilerplate language that exceptions might make up “substantial” or “significant” portions of the pool (Bajaj and Anderson, 2008). The number and character of exceptions, which ran as high as 50 to 80 percent of some loan pools, would have an enormous effect on the quality of the loan pool and should have been disclosed (Bajaj and Anderson, 2008).

Investors often were not notified of the changing nature of the mortgages that

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<sup>8</sup> According to Randall S. Kroszner, Governor of the Federal Reserve, “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.” (Kroszner, 2008).

were being securitized. For example, while investors might have been told of the number of no or low documentation loans, they often were not informed that such loans were being marketed to a different kind of borrower, wage earners who should have easily been able to document their income (Adelson and Jacob, 2007) Wage earners who can easily document their income but affirmatively choose not to are significantly more risky borrowers than non-wage earners that lenders choose for reduced loan documentation because of the borrowers’ low credit risk (Dungey, 2007). However, this change in the type of borrower using low documentation loan was not adequately disclosed.

Investment houses also should have disclosed the results of their due diligence efforts in determining whether the loans fit the purported qualifications of the pool. In this due diligence process, some portion of the pools would be examined, often by a third party, to see if the mortgages met the criteria for the pool. What percentage failed in this examination was important information for investors, as it would tell them about the actual, as opposed to claimed, underwriting by the lender. Instead of disclosing the due diligence reports to rating agencies and investors, however, it appears that some Wall Street firms may have been using those reports primarily to increase their own profits. According to recent reports, some Wall Street firms used due diligence reports showing a large number of problem loans in order to negotiate a lower price with the originator, then securitized the problem loans anyway without disclosing the problems to investors (Mortenson 2010). Such behavior, if proven, stands due diligence on its head, and turns it from a mechanism to protect investors from problem loans to a mechanism for investment houses to benefit from problem loans at the expense of investors who unknowingly end up with the bad loans.

### **3. Pushing Risk to Its Limits**

One hazard of securitization is that it encourages each market participant to push risk tolerances to their limits in an effort to maximize profits. For example, during the subprime boom, mortgage brokers could increase their income by closing as many loans as possible, convincing borrowers to take the largest loans they would qualify for, and inducing borrowers accept interest rates higher than what their credit records justified, all of which increased the risk of defaults. Brokers’ commission was often based on loan amount and the number of loans, and so if they could upsell the amount of loan and close as many loans as possible, they could maximize their earnings. This motivated brokers to learn the limits of lenders’ underwriting standards, often automated, and to push those limits as far as possible. Worse yet, yield spread premiums, additional payment to brokers when borrowers accepted interest rates higher than their credit could have justified, further rewarded brokers who could lure borrowers into taking loans with higher interest rates, leading to even riskier loans (Gordon, 2009).

As a result of these broker incentives, loans originated through a mortgage broker have experienced significantly higher delinquency rates (more than 50% higher, according to one study) than loans originated directly by a bank (Jiang, Nelson, and Vytlačil, 2009). Jiang, et. al. conclude that brokers not only “apply looser lending standards” but are also “less diligent in verifying borrower information” than banks originating their own loans, with the likely result being increased information falsification for loans originated by brokers.

While brokers were testing the underwriting limits of originators, originators were also testing the secondary market to see what loans it would accept, and used the information they gleaned to weaken their underwriting if they could sell more loans by doing so. While offering materials for subprime-backed securities touted subprime lenders’ underwriting standards to investors, it appears that for at least some non-prime lenders, the primary if not sole underwriting question was whether the loan could be securitized. In securities litigation by the Securities and Exchange Commission against Angelo Mozilo, of Countrywide Financial Corp., at one time the nation’s biggest residential mortgage lender, the SEC has argued that “the evidence is clear that by as early as July, 2005, Countrywide’s primary ‘underwriting standard’ was not the borrower’s ability to repay the loan, but rather whether it could sell the loan into the secondary market, where Defendants apparently hoped the performance of the loan would then become the purchaser’s problem.” (SEC Brief, 2010). If so, Countrywide was succumbing to the siren call of securitization.

When loans were being securitized, again risk tolerance was pushed to the limits. Because highly rated securities are, all else being equal, more valuable than those lower rated, and because credit enhancements, like over-collateralization of loans or default insurance designed to protect investors from the risk of default, can be expensive, securitizers profit when rating agencies give the maximum high rating for the resulting securities while demanding the cheapest credit enhancements. Wall Street firms and other securitizers were rewarded for assembling the worst loans with least expensive credit enhancements that would receive the desired credit ratings. They pushed rating agencies to weaken their rating quality.

Rather than mortgage-backed securities at each rating level with risk tolerances across the whole band of risk tolerances for that level, the securitizers were encouraged to create securities always just barely justifying the given rating level (Eggert, 2009, Brunnermeier, 2009). In other words, when mortgage or CDO securitization produced investment grade securities, it produced the riskiest investment grade securities that the rating agencies would permit. This pushing of risk to its edge of tolerance has made the entire system more fragile. Much like an eco-system with little bio-diversity is more vulnerable to environmental change, so too a mortgage finance system based on pools of mortgages all pushed to the limit of risk tolerance is more vulnerable to a financial shock.

#### **4. Bargaining Down Due Diligence**

Securitization atomized the mortgage process, breaking it apart and assigning its various functions to different business entities (Jacobides, 2001). Instead of a lender originating, holding and collecting payments for its own loans, a mortgage broker dealt directly with the borrower, a lender originated the loan, an investment house bundled it for securitization, a rating agency blessed the resulting securities with its ratings, and a servicer collected the mortgage payments with perhaps another servicer stepping in to foreclose. This atomization not only gave market participants incentives that conflicted with those of investors, with originators, investment houses and even rating agencies rewarded for quantity of loans over quality, but also gave those interested in quantity over quality the ability to bargain down the due diligence and quality control of other market participants.

Home appraisers widely complained of lender pressure to inflate the value they assigned to houses for lenders. Lenders that hold their own loans desire accurate



appraisals to protect themselves with an equity cushion should the borrower default. For lenders that securitize, however, home appraisals represented not a protective mechanism to reduce loan losses but rather a pesky hurdle to overcome in order to make and sell the loan. Artificially inflating the appraised values makes loans more valuable by decreasing their loan-to-value ratios and can also justify higher loan amounts. Banks too often let their loan officers or underwriters manage the hiring of appraisers, which allowed their loan officers to pressure appraisers to come up with an appraisal high enough to justify the desired loan (Taylor, 2004). Appraisers that refused to meet appraisal targets could expect to lose business as a result (N.Y. Comm’n of Investigation, 2008). Other appraisers apparently did “play ball” with lenders and brokers, and a review of a small sample of loans from 2006 that suffered early default showed that more than half had appraisal problems, such as inaccurate appraisals, conflicting information, or items “outside of typically accepted parameters” (Fitch Ratings, 2007).

During the boom years, subprime loan securities were in such high demand and subprime loans hence so valued that subprime originators could demand that investment houses engage in less due diligence and could resist having to buy back all of the shoddy loans that the diminished due diligence uncovered. While Wall Street firms might have ordered twenty-five to forty percent of loans to be reviewed before they were securitized shortly after 2000, by 2006, this percentage had fallen to, typically, 10 percent (Reckard, 2008). Large subprime originators had so much leverage that they could bargain down this due diligence, insisting that Wall Street firms engage in far less due diligence for loans that would be securitized than financial firms would conduct for loans they intended to hold in portfolio (Muolo and Padilla, 2008).

Similarly, Wall Street firms could shop among rating agencies to obtain the most favorable ratings given the quality of loans, relying on the rating agencies’ conflict of interest created by the fact that they were paid by the securities issuers they were supposed to judge rather than the investors they were supposed to protect (Raiter, 2008). One internal rating agency memo noted, “The real problem is not that the market . . . underweights ratings quality but rather that, in some sectors, it actually penalizes quality by awarding rating mandates based on the lowest credit enhancement needed for the highest rating.”<sup>9</sup> Rating agencies appear to have responded to Wall Street pressure by downgrading the quality of their ratings, especially when doing so would allow them to secure sole rating authority over a security offering. Benmelech and Dlugosz (2009) find that where only one agency rated a set of securities, those ratings were more likely to be downgraded. Becker and Milbourne (2008) find that, at least for corporate ratings, competition between rating agencies is accompanied by a decrease in rating quality. Ashcraft, Pinkham-Goldsmith, and Vickery (2010) also find correlation between rating quality and number of rating agencies who rated a deal, but more importantly conclude that there was a significant erosion in the quality of credit ratings at the peak of the subprime boom and that securities backed by high risk loans or low documentation loans have been consistently overrated.

## **5. Subprime’s Boom and Bust Cycle**

One of the dangers of securitizing subprime loans is that it links those loans directly to the capital markets, which for subprime lending is a relatively unstable funding supply, one that has crashed twice already in the young life of subprime

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<sup>9</sup> This memo is from a confidential presentation to Moody’s Board of Directors, and was made public for a hearing *Credit Rating Agencies and the Financial Crisis: Hearing Before the H. Comm. On Oversight and Gov’t Reform*, 110th Cong. (2008). <http://oversight.house.gov/documents/20081022111050.pdf>

securitization. The securitization of subprime loans started first in the late 1980s, but did not gain much volume until the mid-1990s (Gittelsohn, 2007). The first subprime crash occurred in 1998, when the combination of the Russian debt crisis and the collapse of the private hedge fund Long-Term Capital Management (LTCM) caused investors to jettison subprime securities in their rush to the safety of U.S. Treasury securities. Subprime lenders suffered a double blow as they received a lower price for loans they had in the pipeline at the same time that their cost of funds increased (Sabry and Schopflocher, 2007). The stock values of subprime lenders plummeted, some to zero, and fallen subprime lenders that had depended on securitization included some of the biggest names in subprime (Muolo and Padilla, 2008. White, 2006). While subprime lenders had suffered some greater than expected default rates and had played accounting games, the first subprime collapse seems to have been for reasons largely external to the subprime market (Danis and Pennington-Cross, 2005).

Realizing that they are tied to such an unstable money supply would naturally lead subprime lenders to become greater risk-takers. If a subprime lender had scrupulously maintained its underwriting standards throughout the subprime boom, it still would in all likelihood have found itself unable to stay in business, cut off from its funding source when subprime crashed, as subprime securitization has essentially disappeared. The lender would have obtained no benefit for forgoing making even default-prone loans that could be securitized, as there would be no long-term reputational benefit for good underwriting once the lender is out of business. As federal regulators and the financial market attempt to restart private-label mortgage underwriting, they must not only convince investors that the loans will be well-underwritten, they must also

convince subprime lenders that there are benefits for good underwriting and that lenders should not just engage in a race to the bottom before the market collapses again.

#### **6. Securitization and “Hard” vs. “Soft” Mortgage Underwriting**

Between 2002 and 2006, underwriting standards became significantly degraded. For example, the median loan to value ratio of new subprime loans increased from 90 percent to 100 percent from 2003 to 2005 (Mayer, Pence, and Sherlund, 2009). There has been significant academic discussion about how much this underwriting decline led to the increased foreclosure and default rate, and how much was due to declining housing prices, but it appears likely that both played a role. Gerardi, Shapiro and Willen (2009) argue that declining housing prices led to the rapid increase in foreclosures, though concede that underwriting standards did decline, creating a set of borrowers “particularly vulnerable to the decline in prices.” Others note the great role increasingly shoddy underwriting played in the increase in defaults and foreclosures (for example Dell’Ariccia, Igan and Laeven, 2008, and Mayer, Pence, and Sherlund, 2009), though they too note the relevance also of declining housing prices.

Even to the extent that declining housing prices led to the rise in defaults, securitization still seems to have played a role in the housing price bubble, the popping of which led to those housing price declines. Some have blamed the bubble on the federal government’s monetary policies. The national government of the United States and Canada however had similar expansionist monetary policy in the last decade, yet housing prices in Canada did not exhibit the boom and bust seen in the United States, and Canada’s mortgage delinquency rate has been much lower than that of the United States (MacGee, 2009). MacGee (2009) concludes that the larger subprime market and more

lax underwriting standards in the United States were critical factors in the housing bubble and bust, rather than overall monetary policies.

In discussing declining underwriting standards, it is important to recognize the multiple dimensions of underwriting. Some underwriting is based on hard, objective data which can be determined with little direct knowledge of the borrower and fairly easily communicated to the secondary market. Automated underwriting systems, and their use of data points such as loan to value ratios, borrower income and assets, and FICO scores use “hard” mortgage underwriting both on the lender level and by the secondary market to evaluate loans for securitization (Anderson, et. al., 2008). “Soft” mortgage underwriting is based on more personal, subjective information, such as direct knowledge of the borrower, the borrower’s explanation for credit mishaps or for anticipated earnings, or the neighborhood wherein the house is located (Rajan, Seru and Vig, 2010).

Each form of underwriting has its strengths and weaknesses, with hard mortgage underwriting faster and cheaper, and less subject to favoritism or red-lining, while soft mortgage underwriting is better at reacting to new and different mortgage conditions with common sense, rather than relying on a statistical analysis mired in the past (Browning, 2007, Rajan, et. al. 2010). Ideally, lenders would employ both hard and soft mortgage underwriting, so that the strengths of each would make up for the weakness of the other. One of the great challenges to restarting subprime securitization will be to reestablish automated underwriting, given that past subprime default data will have been under a completely different regulatory regime and those designing automated underwriting systems will initially have little useful current data on which to base their programs.

Securitization led to the decline, if not often the virtual elimination, of soft mortgage underwriting for loans designed to be securitized. Originators had no incentive to gather “soft” information that could not be communicated to the Wall Street firms, rating agencies and investors that would determine which loans would be securitized. Demyanyk and Van Hemert (2008) conclude 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).” Anderson, Capozza, and Van Order (2008) found a two-stage decline in underwriting standards, with hard mortgage underwriting standards declining during the 1990s, possibly as investors gained confidence in the securitization of subprime loans, and a second decline after 2004 that was not as readily apparent to the secondary market. Rajan, Seru and Vig (2010) also find a decline in soft mortgage underwriting, noting 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.

## **7. How Securitization Amplifies Default Risk**

Securitization perniciously amplified the damage caused by non-prime defaults beyond the mere losses the defaults would have caused if they had been held by financial institutions as whole loans. Some financial institutions have regulatory requirements that

treat investment grade securities very differently from non-investment grade securities. Financial institutions, either through regulation or by agreement, may have requirements concerning investment grade securities “hard coded” into them. If they hold too many securities that are downgraded below investment grade, they may have to raise significant additional capital, may have their counterparty status threatened or their liquidity questioned, and may even be considered “troubled” (Berg, 2009). If the investment grade mortgage-backed securities have all been “rated at the edge” by rating agencies eager to maximize their rating business, the securities may be too prone to being downgraded, thus unduly threatening the institution that holds them.

Securitization reduced financial transparency for investors and regulators attempting to determine the subprime risk held by various financial institutions. Instead of holding whole loans so that their risk was fairly obvious, financial institutions held subprime risk that had been sliced apart and reassembled in such complex and multitudinous transactions that even the financial institutions themselves had difficulty in determining what their own exposure was. For example, Citigroup recently settled claims that it had wildly underestimated its subprime exposure, claiming in mid-October, 2007, that it had “only” \$13 billion in subprime exposure, only to admit in early November, 2007 that its “direct exposure” for subprime was about \$55 billion, which included “‘super-senior’ tranches of collateralized debt obligations and financial guarantees known as liquidity puts that allowed customers to sell debt securities back to Citigroup if credit markets froze,” according to the SEC (Westbrook and Keoun, 2010).

Had Citigroup’s federal regulators realized the extent of its subprime exposure, they might well have demanded that it take steps to reduce that exposure or to allocate

additional capital reserves because of the risk. Investors might have pulled out or threatened to pull out of Citigroup’s stock, giving it further encouragement to reduce its subprime risk. Because that exposure was relatively hidden, though, regulators and investors did not have adequate opportunity to rein in Citigroup’s risky behavior.

This lack of transparency contributed greatly to the global liquidity crisis that followed the subprime meltdown and accompanying increase in mortgage defaults. Securitization has led to an “opaque web of interconnected obligations,” significantly increasing counterparty risk, in that financial institutions have difficulty determining the stability of their counterparties (Brunnermeier, 2009).

Securitization also amplifies the risk of foreclosure by making it harder for borrowers to obtain appropriate loan modifications. Securitized loans are exhibiting higher foreclosure rates than unsecuritized loans, not only because of the effect securitization had on underwriting, but also due to the fact that third-party servicers act on behalf of investors to collect mortgage payments, monitor defaults and also foreclose. Securitization makes it more difficult for borrowers to resolve problem loans, due to such factors as “tranche warfare” whereby a servicer is concerned that a loan modification may benefit one tranche of a mortgage deal above others, leaving the servicer open to claims of favoritism and breach of the fiduciary duty to treat all classes fairly (Eggert, 2002). Servicers’ self-interest may also encourage excessive foreclosures, as servicers may benefit more from the foreclosure than they would from a loan modification (Eggert, 2007). In this way, securitization also amplifies the effects of loan defaults by causing more loan defaults to turn into loan foreclosures.



Economists currently do not all agree that securitization increases foreclosures by limiting effective loan modifications or other workouts. However, those who argue that loans serviced by third parties have higher foreclosure rates than those held in portfolio appear to be gaining the upper hand. Adelino, Gerardi, and Willen (2009) discounted the idea that securitization made effective loan modification more difficult, and asserted instead that servicers are failing to engage in widespread loan modifications merely because such modifications would not make economic sense. Instead, according to their analysis, investors may often benefit if servicers either passively wait to see if borrowers find some other way to cure the loan or if servicers foreclose, and so avoid the high risk of re-default after modification. However, a recent paper by Piskorski, Seru and Vig (2010) has concluded that securitization causes a “foreclosure bias,” noting, “Controlling for contract terms and regional conditions, we find that seriously delinquent loans that are held by the bank (henceforth called ‘portfolio’ loans) have lower foreclosure rates than comparable securitized loans (between 3% (13%) to 7% (32%) in absolute (relative terms).” Piskorski, et. al. also note that governmental agency reports on loan modifications also validate the idea that securitized loans exhibit a “foreclosure bias,” and state, “OCC and OTS Mortgage Metrics Reports (2009b) point out that the re-default rate for renegotiated loans serviced by third parties was significantly higher than the re-default rate for loans held in the servicers’ own portfolios (for example, 70% higher after six months).

It is unlikely that those holding loans in their own portfolios are regularly failing to foreclose when foreclosing would be in their own best interests. Hence, because loans held by third party servicers have a foreclosure bias as compared to loans held in

portfolio, it appears likely that servicers are foreclosing on some loans even when it is in the interest of the investors not to do so. Foreclosures can cause great damage, not only to the homeowner, but also to neighboring property values and the community (Eggert, 2009). By causing more troubled loans to be foreclosed rather than resolved, securitization amplifies the damage of problem loans.

### **CONCLUSION**

Governmental regulators and the financial industry are now in the process of attempting to re-write the rules of the road regarding private-label mortgage-backed securitization. The Dodd-Frank bill contains a broad outline of some improvements, but leaves many of the specific changes to regulations created by a variety of federal regulators. As those regulators and the financial industry work to put private-label securitization back together, it is important to recognize that the flaws of the previous system go far beyond the lack of both “skin in the game” by originators and transparency for investors. Some in the financial industry are advocating for minimizing the changes to the system, as if adding a dash of disclosure and risk retention were all that was needed for a safe and vibrant system of private-label securitization. However, the structural problems of private-label mortgage securitization go far beyond mere “skin in the game” and transparency. Those who would seek to prevent another crash need to make bold, rather than merely cosmetic, changes. By addressing all of the problems of mortgage securitization, we can maximize our chances to avoid another mortgage crisis caused in large part by securitization.

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