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SPECIAL REPORT

A Clarification on Risk Retention

Prepared by

Cristian deRitis
Director
+610.235.5000

Mark Zandi
Chief Economist
+610.235.5000

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BY CRISTIAN DERITIS AND MARK ZANDI

In our previous comment on the Dodd-Frank risk retention rules for asset-backed securities, we argued that while the proposed rules were well-intentioned, as written they would probably fall well short of their goal of restoring confidence in securitization. Even this less than ringing endorsement was based on the assumption that those parts of the proposed rules that were unclear and open to significant interpretation would be revised to conform with standard industry practices and nomenclature. However, more recent comments from some regulators suggest that this may not occur, and that regulators will instead hold to a strict reading of the proposed rules. This is most important with regard to the premium capture provisions of the risk retention rules. In this note, we review our previous analysis and quantify the consequences for mortgage rates of a stricter interpretation of the premium capture provisions.

Risk retention and securitization

Securitization, or the pooling of consumer and business loans into financial instruments that can be traded in secondary markets, expanded the availability of credit and became a cornerstone of the global credit market over the past few decades. The system broke down for residential mortgages, however, during the euphoria of the housing bubble. Investors in mortgage-backed securities grew attached to the returns they received relative to Treasuries or other bonds and came to believe there was little or no risk in mortgage lending. This increased demand and encouraged lenders to originate millions of loans that could only be repaid in an environment of rising housing prices. Once prices started to drop, such loans failed and the financial system froze up. The government's bailout headed off an apocalyptic decline and a second Great Depression, although a severe credit crunch ensued.

The financial system has since recovered to a large degree, although private securitization for residential mortgages remains dormant. Both issuers and investors are

extremely wary of new securities given the uncertainty around legal liability and government regulation. Without resolution to these issues, private securities markets will not revive and the government will need to continue to prop up the market through Fannie Mae, Freddie Mac and the FHA. Fixing the private securitization system is vital to reducing the government's role in the mortgage market.

The most fundamental problem with residential mortgage securitization involved misaligned incentives. Those who originated and packaged loans into securities were motivated to produce as many as possible; as long as investors kept buying without questioning the quality of the underlying loans, issuers kept originating, moving further down the credit spectrum. Investors felt comfortable with their RMBS purchases given spectacular returns from 2001 to 2004 and the assurance of rating agencies that the structure of the securities offered adequate protection against losses.

Risk retention is an effort to address this incentive problem. Under the new

rules, securitizers will be required to keep an ownership stake of at least 5% in the securities they create. The Dodd-Frank financial reform legislation laid out the rule in general but ordered regulators to provide details. Various federal agencies, including the Treasury, Federal Reserve, Federal Housing Finance Agency, and the Federal Deposit Insurance Corp. proposed specific risk retention rules in April and requested public comment by the start of August¹. Given the length and complexity of the proposed rules and the large volume of comments received, it will likely take regulators at least several months to review and revise their risk retention proposal.

The idea behind risk retention is intuitive: If securitizers own a stake in the securities they produce, they will produce better securities. Investors will thus have more confidence and be willing to purchase them as they did before the crisis. Stronger investor demand will drive a rebirth of securitization.

¹ For more on risk retention with regard to residential mortgage securities, see our companion piece, ["The Skinny on Skin in the Game."](#)

Premium capture

A major problem for regulators is how to keep securitizers from dodging the risk retention rules. Regulators are particularly concerned that securitizers will compensate for the rules' extra costs by raising fees, rather than by improving their underwriting. To avoid this problem, regulators have proposed a so-called "premium capture" rule. Unfortunately, the rule is less likely to accomplish its goal than it is to increase borrowing costs and restrict mortgage credit.

Securitizers charge borrowers a rate higher than they pay to the investors who purchase mortgage-backed securities.² In addition to covering the costs of originating and servicing the mortgages, this spread helps cover the securitizers' costs, provides them a return, and builds a reserve against future loan defaults. While the spread is collected over the life of the loans, securitizers historically have been able to collect the full discounted stream of income up front, by selling an interest-only bond backed by the spread. The premium capture rule will effectively end this practice by making it prohibitively expensive. Securitizers would have to wait until the loans backing the bond had been exhausted and all proceeds paid to bondholders before collecting their fees from whatever cash remained. Mortgages typically either pay off or fail within 10 years of their origination, but theoretically, it could take much longer, especially for loans originated with very low interest rates.

In our original analysis, we assumed that regulators would allow originators to be compensated for their costs³. That is, originators could charge and collect a reasonable

fee up front to cover their origination and securitization expenses including credit risk, but anything over this amount would be locked away in a premium capture account. However, the rule as written does not state this clearly. In fact, a strict reading of the rule suggests that originators would have to place all proceeds above the par value of the bond into the premium capture account—meaning they would have to wait a number of years to recover even a portion of their costs.

Under this scenario, issuers would have to charge substantially higher interest rates to compensate them for the delay in receiving payment. In addition, they would run the risk of receiving smaller or no payment, as their proceeds would be applied to any loan losses before bond investors lost principal. This significantly changes the originators' business model: Instead of being paid for underwriting services, they would become junior debt investors.

An even greater issue with a strict interpretation of the rule is that it would impede originators' ability to be compensated for the credit risk of their mortgages and to institute risk-based pricing. For example, suppose a mortgage lender wants to originate 1,000 loans with a balance of \$200,000 each. Pooling these together would create a bond with a face value of \$200 million.

Based on idiosyncratic risks such as the death, divorce or sudden unemployment of a borrower, there is a chance that some loans will not be paid in full, resulting in a loss to the owners of the mortgages. Bearing this in mind, an investor in this pool would not be willing to pay the full face value of the mortgages but something less, say \$190 million, assuming a 5% discount.

Knowing this is the case, the originator will need to charge borrowers a higher interest rate to compensate for this shortfall between the face value of the mortgages and the market value to an investor. If he charges borrowers a 5% fee up front, he will cover the balance (i.e. 5% of \$200 million plus \$190 million).

At the individual loan level, a 5% up-front fee translates into \$10,000, a nontrivial amount of money for the vast majority of mortgage borrowers. Rather than requiring

the fee up front, an originator would traditionally be willing to finance this amount by rolling it into the interest rate. Assuming the loans would typically last for four years, a 5% up-front fee would be roughly equivalent to an additional 1.25 percentage points on the mortgage rate. Note that, for the purpose of this simple example, we are assuming that the operational costs involved with processing mortgage applications are covered separately by the borrower. If they are financed, such as in the case of a "no-cost" refinancing, then these fees would also be subject to the premium capture rule.

Based on the par or face value of the mortgages, it would appear that investors are receiving a higher return on their investment than they could receive elsewhere. In this specific example, investors would be willing to pay up to 1.05 times the par value. And under the premium capture rule, these 5 percentage points of premium would have to be locked away in a premium capture account.

The problem here is the fundamental disconnect between a bond's face value and its economic value once credit risks are taken into account⁴. As a result of the way the premium capture rule is stated, the mortgage rate impact to borrowers would be significant—on the order of an increase of 1 to 4 percentage points depending on the parameters of the mortgages being originated and the discount rates applied⁵. Furthermore, the rule may also create incentives not to originate as many 30-year fixed-rate mortgage loans. Securitizers who traditionally fund themselves with shorter-term liabilities may

2 This is a form of credit enhancement and is more common on securitizations backed by riskier subprime, alt-A and second-lien mortgage loans. Because of their greater risk, some securitizations build in excess spread by requiring that the weighted average interest rate on the underlying mortgage loans be greater than the weighted average coupon rate for the tranches in the security. If there are credit losses from any of the loans within any given month, this excess spread is applied against them; otherwise, the holder of the equity or residual portion of the security collects this income.

3 We note that while a securitizer can manifest itself sometimes as a broker/dealer issuer looking to be compensated for bond underwriting, it is more often the case that the securitizer would be an originator and issuer (especially in today's environment). In light of this, we treat originators and securitizers as a single entity for ease of exposition. Our argument still applies to the case where the two entities are distinct as originators have typically been paid for their underwriting services up front.

4 This is not unlike the difference between coupon and yield in the pricing of sovereign debt. For example, currently an Australian 10-year bond with a stated coupon of 5.75% trades at 110. This means investors are willing to pay \$1,100 today for a bond that will pay \$57.50 every year plus \$1,000 10 years from now. Given the \$100 premium being paid for this \$1,000 bond today, the effective yield to the investor is 4.43%. In some sense, the stated coupon is irrelevant to the investor's decision—what he really cares about is how much his investment will return over time. Similarly with mortgage bonds, the face value is not particularly meaningful. What matters is how many borrowers will end up paying their loans and returning principal and interest.

5 Note that in our example we made several simplifying assumptions for presentation purposes. A complete cash flow analysis would be required to derive the rate impact with precision and would require detailed information regarding the collateral, discount factors, yield curve, etc. Our fundamental conclusion is that a strict interpretation of the premium capture rule could increase borrowing costs by percentage points, not basis points.

not be able to effectively match the fees they will earn over a longer period of time given the impact of premium capture.

In order to avoid the premium capture rule, loan originators could end up shifting from capitalizing origination costs in higher interest rates to charging borrowers higher up-front fees at the time of origination. In theory, it is even conceivable that originators could charge enough in fees to avoid the costs of risk retention altogether. Mortgage rates would be higher, but securitizers would have no additional skin in the game.

However, the Federal Reserve is currently in the process of determining the set of product features for “qualified mortgages” that lenders could originate without risk of legal liability if borrowers should default. Under the Dodd-Frank Act, lenders could charge no more than 3% of the borrowed loan amount in points and fees in order to be a QM. As a result, the premium capture rule has the potential to significantly restrict the amount of credit available for borrowers without qualified residential mortgages.

Perhaps this is exactly what regulators had intended. If so, the premium capture rule is a very inefficient tool for reaching this objective. Having now made a proposal, policymakers must now consider the full ramifications of the rule before finalizing

it. Not only would it limit the number of households that could borrow to purchase homes, but it would also limit the ability of borrowers to take advantage of refinancing opportunities. This impact could be meaningful, as historically most refinancing has been done without borrowers paying points or up-front fees.

Despite the complications and secondary effects of the proposal, it could still represent a reasonable compromise if it guaranteed an end to the abuses it seeks to address. However, it is not clear that the premium capture rule is necessary—or even able—to stop the kind of risk retention-dodging regulators are focused on. Given the massive losses suffered by investors in the interest-only bonds sold by securitizers during the housing bubble, future investors will be extremely cautious and will require significant assurance that bonds are appropriately priced for the risks they involve. It is very unlikely securitizers will be able to dispose of their risk exposure without paying for it appropriately. Now that it is common knowledge that weak underwriting is a risk and house prices can actually fall, market forces will work well on their own to limit bad securitizations. Consumer protections regulating mortgage types and features would far more effectively limit

the number of fraudulent and unsustainable loans.

The premium capture rule is well-intentioned; there should be limits in place to insure that issuers do not deviate radically from market norms. Yet the consequences of the rule as written could significantly impede the return of private securitization markets and permanently cement the government’s role in housing finance. In addition, the rule could create unintended consequences by encouraging securitizers to find creative ways around it. Altering the securitization structure or increasing up-front fees are two obvious outcomes, but there are likely to be others that neither regulators nor analysts have thought of.

Policymakers need to either clarify all of the minutiae embedded in the premium capture rule to insure that loan originators are fully compensated or eliminate the rule altogether. Given the complexities involved with implementing the rule and determining a fair market price for origination and securitization, the latter option may be preferable. Increasing checks and balances with greater up-front due diligence and stronger recourse provisions will be much easier to implement and far more effective in ensuring the quality of mortgages that are originated and placed into securities.

About the Authors

Cristian deRitis

Cristian deRitis is a director in the Credit Analytics group at Moody's Analytics, where he develops probability of default, loss given default, and loss forecasting models for firms and industries; contributes to forecasts and analysis for CreditForecast.com; and writes periodic summaries of the mortgage and consumer credit industries. In his previous work at Fannie Mae, Dr. deRitis supervised a team of economists who developed models of borrower default and prepayment behavior. He has published research on consumer credit and credit modeling as well as on the costs and benefits of community mediation. He received a Ph.D. in economics from Johns Hopkins University, where he focused on the impact of technology on labor markets and income inequality. His bachelor's degree in economics is from the Honors College at Michigan State University.

Mark Zandi

Mark Zandi is chief economist of Moody's Analytics, where he directs research and consulting. Moody's Analytics, a subsidiary of Moody's Corporation, is a leading provider of economic research, data and analytical tools. Mark is the author of *Financial Shock*, an exposé of the financial crisis. His forthcoming book, *Paying the Price*, provides a roadmap for meeting the nation's daunting fiscal challenges. He is on the board of directors of The Reinvestment Fund, a Philadelphia nonprofit that marries public with private capital to make investments in inner cities, and MGIC, a publicly traded firm that is the nation's largest private mortgage insurer. Dr. Zandi received his Ph.D. at the University of Pennsylvania, where he did his research with Gerard Adams and Nobel laureate Lawrence Klein, and received his B.S. from the Wharton School at the University of Pennsylvania.

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CONTACT US

For further information contact us at a location below:

U.S./CANADA
+1.866.275.3266

EMEA
+44.20.7772.5454

ASIA/PACIFIC
+852.3551.3077

OTHER LOCATIONS
+1.610.235.5299

Email us: help@economy.com
Or visit us: www.economy.com

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