

## SECURITIZATION AND STRUCTURED FINANCE <sup>1</sup>

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Securitization—or, as it is spelled in Europe, securitisation—refers to a category of financing transactions in which companies sell rights to payment under mortgage loans, accounts receivable, lease rentals, or other types of income-producing “financial assets” to a trust or other special-purpose vehicle (an “SPV,” sometimes interchangeably called a special-purpose entity or SPE). The goal is to separate these assets from the risks generally associated with the company. The company then can use these assets to raise funds in the capital markets at a lower cost than if the company, with its associated risks, had borrowed the funds.

A threshold question is how securitization and structured finance differ, since the terms are often used interchangeably. In practice, most references to structured finance mean securitization. Structured finance can refer more broadly, however, to any transaction that utilizes special-purpose vehicles. Project finance, for example—in which the construction of powerplants, toll roads, and other income-generating public-interest projects is financed from loans which are repaid from the income so generated—is a type of structured finance transaction. Although more problematic, the special-purpose-vehicle transactions engaged in by Enron are also types of structured finance transactions.

With the limited exception of Enron, which is briefly discussed to help explain potential abuses, this article focus on securitization, which is the dominant form of structured finance transaction.

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## I. OVERVIEW OF SECURITIZATION

Companies engaging in securitization transactions are typically called “originators” (referencing their origination of the financial assets), to distinguish them from the SPV companies. Concurrently with an originator selling financial assets to an SPV, the SPV issues securities to capital market investors. The SPV uses the cash proceeds of the securities issuance to pay the originator the purchase price of the financial assets. Investors in the SPV’s securities are paid from collections on the financial assets purchased by the SPV. If, for example, those financial assets are residential mortgage loans, investors are paid from mortgage payments made by homeowners. At least prior to the recent financial crisis, investors have seen securities issued by SPVs in securitization transactions as a relatively low-risk investment with liquid secondary markets.

Securities of an SPV that are paid, or “backed,” from collections on mortgage loans are called “mortgage-backed securities,” or “MBS.” Securities of an SPV that are paid from collections on other types of financial assets are called “asset-backed securities,” or “ABS.” Sometimes even MBS are referred to inclusively as ABS, the more generic category.

*Third-Party Credit Enhancement.* MBS and ABS are often guaranteed by creditworthy third parties, such as insurers that specialize in securitization (called “monoline” insurers because their business is in that single line of insurance). Monoline insurers and other third parties who guarantee MBS and ABS are usually referred to, collectively, as third-party credit enhancers.<sup>3</sup> When there is third-party credit enhancement, investors in the SPV’s securities will look for repayment to collections on the financial assets purchased by the SPV and, if those collections are insufficient, to the third-party credit enhancer.

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*History.* The first securitization transactions to be identified as such took place in the United States in the early 1970s and involved pools of mortgage loans originated by savings and loan associations. These institutions needed to turn their mortgage loans into cash in order to finance local housing demands. To achieve this, the Government National Mortgage Association (Ginnie Mae) facilitated securitizations through SPVs in the form of trusts holding mortgage-loan pools and issuing securities in the form of trust certificates to investors.

Since then, securitization has become the principal means by which banks and other mortgage lenders turn their residential home mortgage loans into cash, in order to make new residential home mortgage loans and expand home ownership in the United States. Indeed, securitization more generally had become so important to the American economy that the Securities and Exchange Commission observed, in 1992, it was “becoming one of the dominant means of capital formation in the United States.”<sup>4</sup>

*Benefits.* Securitization has several important benefits. Securitization of loans (such as mortgage loans, as mentioned) provides liquidity and capital to lenders, facilitating the making of new loans (in the case of mortgage loans, for example, expanding the financing of new home purchases). Securitization also can provide an originator with a diversified means of funding.

Another potential benefit, at least from an originator’s standpoint, obtains when the securitization is booked for accounting purposes as “off-balance sheet.” This means that the cash raised in the securitization transaction does not require an offsetting liability to be shown on the originator’s balance sheet—the cash merely representing the proceeds of the sale of financial assets to the SPV. In recent years, however, originators have engaged in relatively few off-balance sheet securitizations. In the United States, the watershed was the

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<sup>3</sup> STEVEN L. SCHWARCZ, *STRUCTURED FINANCE: A GUIDE TO THE PRINCIPLES OF ASSET SECURITIZATION* § 2:3 (3d ed. & supps. 2010).

<sup>4</sup> Investment Company Act, Release No. 19105, [1992 Transfer Binder] Fed. Sec. L. Rep. (CCH) P 85,062, at 83,500 (Nov. 19, 1992) (provided in connection with the issuance of Rule 3a-7 under the Investment Company Act of 1940).

2005 release by the staff of the Securities and Exchange Commission of a Report criticizing off-balance-sheet transactions and recommending that transactions and transaction structures primarily motivated by accounting concerns, rather than economics, be discouraged through a combination of changes to financial accounting standards and greater awareness by participants in the financial reporting process.<sup>5</sup>

Another important benefit of securitization is that it enables an originator to raise funds at a lower cost than if the originator, with its associated risks, had borrowed the funds. Securitization accomplishes this cost saving for two reasons. The first reason is that by not having to borrow from a bank (or other) intermediary of funds, the originator avoids the bank's profit mark-up. This approach, called 'disintermediation,' is not dissimilar to buying wholesale (rather than retail).

Securitization also accomplishes a cost saving because the interest rate payable on the securities issued by an SPV is ordinarily lower than the interest rate that would have to be paid on corporate securities issued directly by an originator. This interest-rate savings reflects that the creditworthiness of financial assets sold to SPVs in securitization transactions—which, again, are the assets from which investors in the SPV's securities expect to receive payment—should be easier to understand and value, if not safer, than the creditworthiness of originators with all their associated business and other risks.<sup>6</sup>

*Reduction of Information Asymmetry.* Securitization's focus on financial assets, as opposed to having to understand and evaluate all of the risks associated with an originator's business, can therefore help to reduce information asymmetry between the

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<sup>5</sup> REPORT AND RECOMMENDATIONS PURSUANT TO SECTION 401(C) OF THE SARBANES–OXLEY ACT OF 2002 ON ARRANGEMENTS WITH OFF-BALANCE SHEET IMPLICATIONS, SPECIAL PURPOSE ENTITIES, AND TRANSPARENCY OF FILINGS BY ISSUERS (June 15, 2005), available at <http://www.sec.gov/news/studies/soxoffbalancerpt.pdf>.

<sup>6</sup> Thus, securities backed by the financial assets are usually more creditworthy than securities issued directly by the originators. STRUCTURED FINANCE, *supra* note 3, § 1:3 (explaining that except for the most highly rated issuers, securities issued in securitization transactions typically are more highly rated than the issuer's own debt securities—and

originator, on the one hand, and investors and third-party credit enhancers, on the other hand. But actual reduction of information asymmetry still requires investors and third-party credit enhancers to devote careful attention to understanding and valuing the financial assets. The ideal “pool” of financial assets is statistically large with diversified (e.g., non-affiliated) obligors. Residential mortgage loans have been popular financial assets for securitization because they can fit these criteria well. Each loan tends to be relatively small compared to the larger pool of loans, and most mortgagors (i.e., borrowers) on the loans tend to be unrelated to other mortgagors.

Few securitization transactions, however, will have ideal pools of financial assets. Sometimes certain obligors will be affiliated, or certain of the financial assets may have associated business and legal risks, or payment of certain financial assets may be indirectly linked to the originator’s financial condition (e.g., a lessee of an automobile may refuse to pay the lease, or may try to offset payments, if the lessor goes bankrupt and is unable to perform contractual obligations, such as supplying repair service or complying with lease warranties). Investors and third-party credit enhancers also need to pay careful attention to practical considerations, such as the credit standing and repayment ability of obligors on the financial assets and the adequacy of collateral securing the obligors’ repayment obligations. The latter consideration was highlighted in the recent financial crisis by the price collapse of residential housing, which served as collateral on many mortgage-backed securities.

Notwithstanding the reduction of information asymmetry described above, the originator in a securitization transaction will almost always know more about the financial assets than investors or even third-party credit enhancers. To persuade investors and third-party credit enhancers to accept risk on the financial assets, the originator must take the first risk of loss on those assets.<sup>7</sup> It normally does this through

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that, even where the latter are more highly rated, securitization provides additional market flexibility to obtain financing).

<sup>7</sup> Steven L. Schwarcz, *Enron and the Use and Abuse of Special Purpose Entities in Corporate Structures*, 70 U. CIN. L. REV. 1309, 1316 n. 38 (2002).

“overcollateralization,” effectively transferring to the SPV financial assets marginally in excess of the minimum amount needed to repay the securities issued by the SPV.

*Bankruptcy Remoteness.* To further reduce information asymmetry, steps are also routinely taken to help ensure that risks associated with an originator, most notably its potential future bankruptcy, will not directly or indirectly impact the ability of investors in securities issued by the SPV to be paid from collections on the financial assets. This is referred to as achieving “bankruptcy remoteness.” There are two aspects to achieving bankruptcy remoteness.

First, to help ensure that an originator’s bankruptcy will not directly impact the financial assets transferred to the SPV, the transfer of those assets is structured as a so-called “true sale”—that is, a sale sufficient under bankruptcy law to remove those assets from the originator’s bankruptcy estate. Second, various steps are taken to help ensure that the originator’s bankruptcy will not entangle the SPV itself, thereby indirectly impacting the financial assets. For example, the SPV’s organizational structure usually allows the SPV to engage only in the securitization transaction (i.e., it may engage in no other business). This prevents the SPV from incurring debt to other creditors, who might be able to force the SPV into involuntary bankruptcy if their claims are not paid. The SPV is also usually required to have one or more directors who are independent of the originator, the goal being to avoid divided loyalties that might induce the SPV’s directors to voluntarily place the SPV into bankruptcy if doing so would benefit the originator to the detriment of investors in the securitization. Furthermore, the SPV’s organizational structure usually requires strict formalities to be maintained between the SPV and the originator. This minimizes the chance that a court overseeing a bankruptcy of the originator might, in the exercise of equitable discretion, effectively consolidate the assets and liabilities of the originator and the SPV, thereby impairing the timeliness if not also the amount of payment to investors in the securitization.<sup>8</sup>

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<sup>8</sup> A bankruptcy remote transaction can thus be made safer for an investor than a loan—even a secured loan—is for a lender. If the borrower on a loan goes bankrupt, payment may be jeopardized or at least delayed under applicable bankruptcy laws. But if the originator in a

*Senior-Subordinated Structure.* Reducing information asymmetry through bankruptcy remoteness, overcollateralization, and the focus on financial assets for repayment is basic to ensuring that securities issued in securitization transactions are more creditworthy than securities issued by originators. Securities issued in securitization transactions can nonetheless be made even more creditworthy. A common way to do this is for the SPV to issue multiple classes, or ‘tranches,’ of securities, with the most senior-priority securities being paid first (a ‘senior-subordinated’ structure).<sup>9</sup> Senior securities are thereby made less risky than the average risk on the SPV’s financial assets because collections on all those assets, even collections intended to otherwise support payment of subordinate-priority securities, are dedicated first to assure payment of the senior securities.<sup>10</sup>

As a highly simplified example of a senior-subordinated structure, consider an SPV with \$1,000 face amount of financial assets and \$900 of liabilities consisting of \$700 of senior securities and \$200 of subordinated securities. If \$150 of the financial assets turn out to be bad, the remaining \$850 of collections would repay the \$700 senior securities in full, leaving only \$150 (i.e., \$850 minus \$700) to pay the subordinated securities.<sup>11</sup> Investors in the subordinated securities would thus be paid only 75 cents on the dollar (i.e., \$150 on their \$200 of claims). Holders of the subordinated securities bargain to take this higher risk of loss by demanding a higher interest rate on their securities.

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securitization transaction goes bankrupt, bankruptcy remoteness helps ensure that investors in the SPV’s securities will be paid in due course from the SPV’s financial assets. Investors might nonetheless be less safe in a securitization transaction if it turns out that the financial assets are insufficient to pay their securities in full because, unlike the general recourse of a secured lender against the borrower for a collateral deficiency, securitization investors lack a general recourse claim against the originator.

<sup>9</sup> Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211, 220 (2009/10).

<sup>10</sup> *Id.* & 220 n. 46.

<sup>11</sup> This example ignores interest costs.

Another common way to make securities issued in securitization transactions more creditworthy—at least from the standpoint of investors in those securities—is to shift risk from those investors to sophisticated third-party credit enhancers, whose business is to understand the risks and benefits of securitization transactions. As already mentioned, monoline insurers exemplify these sophisticated third-party credit enhancers.<sup>12</sup>

*Rating Agencies.* The discussion so far has described the roles of the following participants in securitization transactions: the originator, the SPV, investors in the SPV's securities, and third-party credit enhancers. Additional parties can play key roles, however, all charging fees for their performance. Rating agencies such as Standard & Poor's and Moody's provide credit ratings on the securities based on their assessment of the expected safety and timeliness of payment to investors.<sup>13</sup> The interest rate necessary to entice investors to purchase the SPV's securities is often a function of these ratings, given that many investors have neither the time nor the resources to fully investigate the financial condition of the issuers of the securities in which they invest. The highest rating on long-term debt securities is AAA, with ratings descending to AA, then to A, and then to BBB and below. The higher the rating, the lower the rating agency has assessed the credit risk associated with the securities in question. Ratings below BBB- are deemed non-investment grade, and indicate that full and timely repayment on the securities may be speculative. Because a high rating signals low credit risk to investors, more highly rated securities can, other things being equal, attract investors more easily than lower rated securities. Therefore, again other things being equal, more highly rated securities bear lower interest rates than lower rated securities.

*Servicing.* Another key participant in securitization transactions is the servicer, who (again, for a fee) acts on behalf of the SPV to collect payment on the financial assets. To this end, a servicer will perform a number of administrative duties, including

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<sup>12</sup> See *supra* note 3 and accompanying text.

<sup>13</sup> See, e.g., Steven L. Schwarcz, *Private Ordering of Public Markets: The Rating Agency Paradox*, 2002 U. ILLINOIS L. REV. 1.

mailing billing statements to the obligors on those assets, collecting payments made by the obligors, and supervising delinquent financial assets, including engaging in debt workout and foreclosure proceedings. The originator itself or an affiliate of the originator, being familiar with and having procedures in place to monitor the financial assets, often acts as the servicer.<sup>14</sup>

## II. THE ECONOMICS OF SECURITIZATION

As discussed, securitization can enable originators to raise funds at lower cost than by borrowing. Securitization can even enable originators to raise funds at lower cost than by issuing securities directly to capital market investors if, as often occurs, the securities issued by the SPV have a higher rating than securities issued directly by the originator. Securitization should therefore create value when the cost of funds, reflected in the interest rate that is necessary to entice investors to purchase the SPV's securities (and adjusted for the costs of structuring the securitization transaction<sup>15</sup>), is less than the cost of the originator's other, direct sources of funding.

Some scholars charge, however, that the lower cost of funds to the originator may simply reflect the shifting of uncompensated risk onto third-parties. This result, they argue, is compelled by the Modigliani & Miller theorem, under which, in a perfect universe, any savings achieved by changing one part of a company's capital structure will result in offsetting costs to other parts of the capital structure, including by taking advantage of third parties.

Others, including regulators, sometimes argue that securitization facilitates off-balance sheet financing. This means that the financing raised by the SPV to purchase the financial assets need not be included as debt on the originator's balance sheet.

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<sup>14</sup> STRUCTURED FINANCE, *supra* note 3, § 4:5, at 4-10.

*Efficiency.* The law and economics literature generally defines efficiency as meaning either Pareto or Kaldor-Hicks efficiency. Pareto efficiency means, in the context of a securitization transaction, that the transaction would make the parties to the securitization—the originator and the SPV’s investors—better off, and no other parties worse off. The only other parties susceptible to being made worse off are the originator’s unsecured creditors. Securitization transactions therefore would be Pareto efficient only if they do not harm the originator’s unsecured creditors. In contrast, Kaldor-Hicks efficiency means, in the context of a securitization transaction, that the aggregate benefit to the parties to the securitization exceeds any net harm to other parties, i.e., to the originator’s unsecured creditors.

Economists generally accept Kaldor-Hicks, and not Pareto, as the operating standard of efficiency. Securitization transactions therefore should be considered efficient if the aggregate benefit to the SPV’s investors and the originator exceeds any net harm to the originator’s unsecured creditors.

*Absent Overinvestment, Unsecured Creditors Are Not Harmed:* Securitization always provides the originator with new money in the form of cash received for the sale of financial assets. Thus it merely substitutes for one type of asset, financial assets, another type, cash. As a result, absent overinvestment (the originator investing or otherwise using that cash proceeds in a manner that reduces its value), unsecured creditors have the same amount of unencumbered assets to levy against after as before the securitization.

In fact, the sale of financial assets may actually benefit the originator and its creditors by transferring the risk on those assets. Unlike a secured loan, where any collateral shortfall gives rise to an unsecured deficiency claim in that amount, in a securitization the SPV and its investors only have recourse against the financial assets

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<sup>15</sup> In this context, it should be noted that whether or not the originator will achieve a cost saving may depend, in part, on the way in which the originator structures the securitization because transaction costs can vary over a wide range.

purchased, and not against the originator or its other assets. Accordingly, the SPV and its investors—and not the originator or its unsecured creditors—bear the risk that those financial assets may be insufficient to repay the investors. If it turns out in retrospect that the overcollateralization was too small, only the SPV and its investors take that risk. On the other hand, if, in retrospect, the overcollateralization was too big, most securitization deals permit the originator, at deal's end, to recover the surplus value from the SPV.

Overinvestment of securitization proceeds can, and undoubtedly sometimes does, occur. But the risk of overinvestment does not necessarily make securitization inefficient. Overinvestment is a normal business risk of any financing, not just securitization. In fact, given the scrutiny imposed by rating agencies, securitization may present fewer opportunities for intentional overinvestment than other financing methods.

To the limited extent overinvestment occurs, it only harms unsecured creditors if the originator becomes insolvent, since unsecured creditors of a solvent company are eventually repaid. Because securitization is rarely used for originators on the brink of insolvency and, as discussed, the risk of overinvestment itself is limited, there should be relatively few cases where unsecured creditors are harmed by overinvestment of securitization proceeds.

Furthermore, viewing securitization transactions in the aggregate, any harm to unsecured creditors in those few cases may well be more than offset by securitization's benefits. There are two such benefits that indirectly profit an originator's unsecured creditors: securitized debt generally has a lower interest-rate cost than the originator's corporate debt, so the cost differential is available to pay unsecured creditors; and securitization can be used to provide needed liquidity to viable originators unable to borrow, keeping them out of bankruptcy (and thus enhancing creditor recovery).

### III. POTENTIAL ABUSES OF SECURITIZATION

Even if securitization is efficient, it can be abused. And structured finance that does not involve securitization funding is especially susceptible to abuse. As an example, consider Enron.

*Enron.* Enron's abuses relied heavily on the use of special-purpose entities and off-balance sheet financing. Although none of the troublesome Enron deals actually involved securitization and, as will be shown, there are fundamental differences between those deals and securitization transactions, the fact that the most common special-purpose entities are SPVs used in securitization transactions creates a taint.

Several fundamental differences distinguish Enron's use of SPVs from securitization and other structured finance transactions. One difference is that securitization is normally used by an originator to obtain lower-cost financing. This is markedly different from Enron's use of SPVs for mere financial-statement manipulation.

To the extent securitization is used to keep debt off an originator's balance sheet, it superficially resembles Enron's use of SPVs. But there are still important differences because securitization, unlike the Enron-SPV transactions, unambiguously transfers risk from the originator to the SPV and its investors; and transfer of risk is, and should be, central to the accounting determination of non-consolidation. Furthermore, as discussed,<sup>16</sup> in recent years there have been relatively few off-balance-sheet securitization transactions.

The third and in certain ways most fundamental difference between securitization and Enron's use of SPVs results not from any particular deal structure but, rather, from the conflicts of interest in Enron. Significant conflicts of interest pervaded the Enron deals. The complexities of those deals, and perhaps even the complexities of certain securitization transactions, make it difficult for corporate directors and shareholders, under existing corporate-law procedures, to knowledgably approve the deals; in the face of complexity, they must also rely on the business judgment of the managers that

structured the deals, a reliance that may be misplaced where (as in Enron) those managers have material conflicts of interest.<sup>17</sup>

*Abuses Relating to the Recent Financial Crisis.* Securitization has also been called into question because of its involvement in the recent financial crisis. The securitization of subprime mortgage loans is widely viewed as a root cause of the financial crisis. In the United States, there was significant government pressure on banks and other lenders to make home-mortgage loans to expand home ownership, even for risky borrowers. These subprime loans were often made, for example, to borrowers with little de facto income, anticipating that home-value appreciation would enable the borrowers to refinance to lower-rate mortgages. Historically, home prices had generally been increasing in the United States since the Great Depression. But this model failed when, in 2007 and 2008, home prices fell significantly.

As a result of the fall in home prices, borrowers who were relying on refinancing for loan repayment could not refinance. Furthermore, many subprime mortgage loans had adjustable rates which increased after an initial “teaser” period. Borrowers who could not afford the rate increases had expected to refinance at lower interest rates. That likewise was stymied by collapsing home prices. For these reasons, many risky borrowers began defaulting.

Because many MBS securitization transactions included subprime loans as a portion of the underlying financial assets, higher than expected defaults on those loans certainly impacted investors in those transactions. The defaults had mostly localized consequences in these basic securitization transactions; but they had larger, systemic consequences in transactions consisting of complex and highly leveraged securitizations

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<sup>16</sup> See *supra* note 5 and accompanying text.

<sup>17</sup> In contrast to Enron, management in securitization transactions would be expected to be free of material conflicts. Although employees of the originator sometimes act as directors of SPVs, their pay in that role is a small fraction of normal corporate salaries.

of MBS and ABS already issued in prior securitizations—effectively “securitizations of securitizations.”<sup>18</sup>

The distinction can be explained in simplified manner as follows. This article has so far discussed basic forms of securitization, in which MBS or ABS are issued by an SPV and payment on the securities is derived directly from collections on the underlying financial assets (which could include, for example, mortgage loans, possibly including subprime loans) owned by the SPV. When the underlying pool of financial assets includes mixed types of assets, such as mortgage loans and non-mortgage loans, the securitization is sometimes referred to as a collateralized debt obligation (“CDO”) transaction. These all constitute basic securitization transactions.

Problems began to arise, however, when MBS securities issued in basic securitization transactions were themselves securitized in highly leveraged “ABS CDO” and similar transactions. The leverage caused relatively small errors in cash flow projections—resulting from unexpectedly high default rates (due to the housing collapse) on subprime loans underlying a portion of the MBS—to create defaults on substantial amounts of low-investment-grade-rated tranches of ABS CDO securities and to cause even AAA-rated tranches of ABS CDO securities to be downgraded.

That, in turn, spooked investors who believed that “AAA” meant iron-clad safety and that “investment grade” meant relative freedom from default. Investors started losing confidence in ratings and avoiding all types of rated debt securities. Fewer investors meant that the price of debt securities began falling. Falling prices meant that firms using debt securities as collateral had to mark them to market and put up cash, requiring the sale of more securities, which caused market prices to plummet further downward in a death spiral. The refusal in mid-September 2008 of the U.S. government to save Lehman Brothers, and its resulting bankruptcy, added to this cascade. Investors lost all confidence in debt markets, and even the short-term commercial paper market virtually shut down. The lack of debt financing meant that companies could no longer grow and, in some

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<sup>18</sup> *Regulating Complexity in Financial Markets*, *supra* note 9, at 220.

cases, even survive. That affected the real economy and, at least in part, led to the financial crisis.

The financial crisis revealed at least four potential flaws in securitization: subprime mortgages may be a problematic asset type that should not have been securitized; the originate-to-distribute model of securitization might create moral hazard; securitization can create servicing conflicts; and securitization can foster overreliance on mathematical models.

The financial crisis also revealed a possible fifth flaw: that investors in securitization transactions may over-rely on rating-agency ratings. The extent of appropriate reliance on ratings, and indeed the integrity of the ratings process itself, are questions beyond the scope of this article.

*Problematic asset type.* The failure of subprime mortgage securitization was caused by its almost absolute dependence on home appreciation. Some believe this type of particular sensitivity to declines in house prices was unique. From that perspective, parties structuring securitization transactions can minimize future problems by excluding, or at least limiting and better managing, subprime mortgage loans as an eligible type of underlying financial asset, and also by conservatively assessing the payment prognosis for other types of financial assets underlying securitizations. The financial crisis also teaches us the danger of mixing politics and finance. Before that crisis, there was political pressure to securitize risky subprime mortgage loans to facilitate financing for the poor.

*Originate-to-distribute model and moral hazard.* Some argue that securitization facilitated an undisciplined mortgage lending industry. By enabling mortgage lenders to sell off loans as they were made (a concept called “originate-to-distribute”), securitization is said to have created moral hazard since these lenders did not have to live with the credit consequences of their loans. Mortgage underwriting standards therefore fell, exacerbated by the fact that mortgage lenders could make money on the volume of loans originated.

There are nonetheless alternative explanations of why mortgage underwriting standards may have fallen. Lower standards may reflect distortions caused by the liquidity glut of that time, in which lenders competed aggressively for business, allowed otherwise defaulting home borrowers to refinance, and (in the corporate lending context) even made so-called ‘covenant-lite’ loans. The fall in standards may also reflect conflicts of interest between lending-firms and their employees in charge of setting those standards, such as where employees were paid for booking loans regardless of the loans’ long-term performance. Blaming the originate-to-distribute model for lower mortgage underwriting standards also does not explain why standards were not similarly lowered for originating non-mortgage financial assets used in other types of securitization transactions. Nor does it explain why the ultimate beneficial owners of the mortgage loans—the investors in the mortgage-backed securities—did not govern their investments by the same strict lending standards that they would observe but for the separation of origination and ownership.

Whether or not the originate-to-distribute model was a significant cause of the financial crisis, the model may need fixing to avoid its perception as the cause. Potential moral hazard problems are being managed, for example, by requiring mortgage lenders and other originators to retain some realistic risk of loss. This is the central approach of the Dodd-Frank Act in the U.S.

*Servicing conflicts.* Mortgage securitization made it difficult to work out problems with the underlying mortgage loans because the beneficial owners of the loans are no longer the mortgage lenders but a broad universe of investors in the mortgage-backed securities. Servicers theoretically bridge the gap between investors (as beneficial owners of the loans) and the mortgage lenders, retaining the power to restructure the underlying loans “in the best interests” of those investors; but the reality is problematic.

Servicers may be reluctant to engage in a restructuring, for example, if there is uncertainty whether their costs will be reimbursed; whereas foreclosure costs are

relatively minimal. Servicers may also prefer foreclosure over restructuring because foreclosure is more ministerial and thus has lower litigation risk. Restructuring can involve difficult decisions. For example, in a mortgage securitization transaction in which cash flows deriving from principal and interest are separately allocated to different investor classes, or ‘tranches,’ a restructuring that reduces the interest rate would adversely affect investors in the interest-only tranche (and likewise, a restructuring that reduces principal would adversely affect investors in the principal-only tranche).

These problems can be minimized. For example, parties can write underlying deal documentation that sets clearer and more flexible guidelines and more certain reimbursement procedures for loan restructuring, especially when restructuring appears to be superior to foreclosure. Parties can also minimize allocating cash flows to investors in ways that create conflicts.

*Overreliance on mathematical models.* To some extent the financial crisis resulted from an abandonment of common sense and an overreliance on complex mathematical models. Models are essential to securitization because of the need to statistically predict what future cash flows will become available from the underlying financial assets to pay the mortgage-backed securities.

Models can bring insight and clarity. If the model is realistic and the inputted data are reliable, models can yield accurate predictions of real events. However, if the model is unrealistic or the inputted data are unreliable—such as when unexpectedly high default rates due to the housing collapse undermined the value of ABS CDO securities—models can be misleading.

Subprime mortgage securitization models relied on assumptions and historical data which, in retrospect, turned out to be incorrect and therefore made the valuations incorrect. Some models were not even based on historical data, such as models for highly-leveraged ABS CDO securities which did not have an active trading market.

When assumptions underlying the models turned out to be wrong, investors panicked because they did not know what the securities were worth.

To some extent this overreliance on mathematical models should be self-correcting because the financial crisis has shaken faith in the market's ability to analyze and measure risk through models. Securitization products are likely to be confined, at least in the near future, to those that can be robustly modeled.

#### IV. THE FUTURE OF SECURITIZATION

Securitization transactions are refocusing on basic structures and asset types in order to attract investors.

Some market observers have also been touting covered bonds, which have a long history in European securities markets, as an alternative to securitization. There is no formal international convention or treaty defining covered bonds. They are instead defined, de facto, by their characteristics. Essentially they are long-term debt securities that are secured by specific assets of the issuer of the bonds. The assets so constituting collateral are called “cover-pool” assets. To the extent the cover-pool assets are insufficient to repay principal and interest on the covered bonds, investors in the bonds have an unsecured claim against the issuer for the insufficiency (‘dual recourse’).

As with any granting of collateral, the cover-pool assets are deemed to remain on the issuer's balance sheet (i.e., they remain owned by the issuer) for accounting purposes. Unlike normal collateral, however, these assets are “ring-fenced”—effectively segregated from the issuer's estate—to give covered bondholders greater protection in the event of the issuer's bankruptcy. Additionally, weak cover-pool assets are required to be replaced by good-quality assets throughout the life of the covered bonds, thereby maintaining a requisite level of “overcollateralization”—a surplus of collateral value over indebtedness.

To ensure this is all enforceable by covered bondholders against other creditors of the issuer, some countries have promulgated specific covered bond legislation (a “legislative” covered bond regime). Absent such legislation, covered bondholders must rely on contractual protections and related commercial law (a “structured” covered bond regime).

Covered bond and securitization transactions have significant similarities. The most important is that both strive for bankruptcy remoteness—the goal of protecting covered bond investors in the event of the issuer’s bankruptcy. Covered bond transactions strive to achieve bankruptcy remoteness through ring-fencing or by legislative fiat. Securitization transactions achieve bankruptcy remoteness by having the company originating the receivables (the “originator”) transfer those receivables, in a “true sale” under bankruptcy law, to a bankruptcy-remote SPV—steps that can parallel ring-fencing. Another important similarity is that after covered bondholders are paid in full, and also after securitization investors are paid in full, any residual value from the transferred assets is returned for the benefit of other creditors.

There are, however, several differences between covered bonds and securitization. A primary distinction is that covered bonds have dual recourse, whereas securitization constitutes non-recourse financing. Another distinction is that, in covered bond transactions, the cover-pool assets typically remain on the issuer’s balance sheet for accounting purposes whereas, in securitization transactions, it has been more typical for the transfer of assets from the originator to the SPV to be accounted for as a sale.

This accounting distinction is somewhat artificial, however. Securitization transactions can be—and increasingly are—structured as on-balance-sheet transactions.<sup>19</sup> The absence of an accounting benefit does not undermine securitization’s key fundraising and risk-transfer functions. The dual recourse distinction, however, is more critical.

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<sup>19</sup> See *supra* note 5 and accompanying text.

Securitization, much like a new-money loan, would not harm unsecured creditors of a company to the extent it entails the exchange of one type of asset (e.g. mortgage loans, automotive loans, or other financial assets) for another asset, cash. But unsecured creditors can fare differently when a company issues covered bonds. Covered bonds are roughly equivalent to a securitization in their neutral immediate impact—unsecured creditors would only be harmed to the extent a covered bond issue increases the issuer's chance of bankruptcy or there is overinvestment of the proceeds of the bond issue. Covered bonds, however, go beyond securitization in two ways that can harm unsecured creditors.

In a securitization, if the overcollateralization is insufficient to repay investors, the investors suffer a loss because they only have recourse to assets that the SPV has already purchased. The pool of assets available for repayment is, in other words, effectively fixed or static. In contrast, in covered bond transactions, the cover pools are usually dynamic, requiring the covered bond issuer to continually segregate new assets as needed to maintain overcollateralization—thereby enabling the covered bonds to continue to be paid in priority to unsecured claims.

Covered bonds also go beyond securitization in their recourse. Whereas securitization transactions are non-recourse, covered bonds have dual recourse. If, therefore, the cover-pool assets are insufficient, covered bondholders have a recourse claim against the issuer. That claim, being *pari passu* with unsecured creditor claims, would further dilute unsecured creditor recovery.

As a result of the dynamic cover pool and dual recourse, covered bond transactions—unlike securitization transactions—thus shift virtually all risk to unsecured creditors.

**Further reading:**

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