Demystifying Securitization for Unsecured Investors

A Product of the Securitization Standing Committee

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Introduction

Over the past three decades, the use of securitization as a financing tool has grown rapidly both in the US and on a global basis. It is an important source of alternate funding, primarily for banks and other financial institutions. Securitization transactions vary in complexity depending on specific structural and legal considerations as well as on the type of asset that is being securitized.

For those unfamiliar with the securitization market and its practices, this report covers the basics to help the reader navigate through the complexities. It provides an overview of securitization including a discussion of the market and how a typical transaction works. The report ends by discussing the impact of securitization on a company’s credit profile and its fundamental rating.

What is Securitization?

Before beginning a discussion on securitization, it is important to define the term. Securitization is the process through which a variety of financial and non-financial assets are packaged into securities that are then sold to investors. The cash flows generated by the underlying assets are used to pay principal and interest on the securities in addition to transaction expenses. The securities themselves are “backed” or supported by the assets and are known as asset-backed securities (ABS).
Welcome to the Securitization Market

The securitization market had its beginnings in the early 1970s with the sale of pooled mortgage loans guaranteed by government agencies. In 1985, the long-term securitization market was established in the US when $1.2 billion in ABS were issued. Since that time, the ABS market in the US has grown dramatically to $280 billion in new issuance in 2001 with about $350 billion anticipated for 2002. While the US market still accounts for the largest share of the global securitization market, it is a maturing sector and its growth rate has slowed considerably compared to the markets in Europe and Asia. This trend is expected to continue for the next several years.

There has also been striking growth in the short-term side of the securitization market known as asset-backed commercial paper (ABCP). At the end of 2001, there was $745 billion in outstanding ABCP, which dropped to $725 billion for 2002. This compares to $696 billion in unsecured corporate commercial paper outstanding at the end of 2001 and $600 billion at the end of 2002 --- down significantly from its peak of $986 billion in November 2000.

The general deterioration in corporate credit quality has been an important factor in the overall growth in ABCP. Due to the downgrade of several issuers’ unsecured commercial paper ratings to below Prime-1, investors have sought the safety of short-term investments backed by assets. However, the ABCP market has recently seen a contraction in outstandings. This is due to regulatory uncertainty and the weak economy as less short-term working capital funding is needed and issuers take advantage of low interest rates in the long-term debt market.

Types of Assets Securitized

Any current or future cash flow that is generated by assets can be securitized. As the securitization market has grown and become more sophisticated, the types of assets that are securitized have broadened. The most common types include mortgage loans, auto loans, credit card receivables, and student loans; aircraft and equipment leases also lend themselves to securitization.

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1. Issuance volumes include only public deals sold in the US. Asset types included are home equities, vehicles, credit cards, student loans, manufactured housing, and other (such as tobacco settlements, equipment leases, and stranded utility costs).

2. For an update on the ABCP market, see Moody's report entitled “ABCP Market Overview: Third Quarter 2002 — Walking in Place, Face to the Wind” written by Sam Pilcer in December 2002.
The more unusual asset types include franchise loans, taxi medallion loans, state tobacco settlement payments, stranded utility costs, and royalty payment streams. There have also been an increasing number of operating asset transactions where the assets securitized, such as railcars or marine shipping containers, are key to the operations of the company.

Players in the Securitization Market

Typically, each securitization transaction has three players:

- **An originator** that generates an asset whether it is a loan, lease, receivable, or other form of payment stream.
- **Intermediaries** that structure the securitization and help facilitate the sale of ABS to investors.
- **Investors** that purchase the ABS.

Originators that Securitize their Assets

Originators that securitize their assets include banks, finance companies, captive finance companies, and to a lesser extent, industrial entities. Typically, an originator makes loans to consumers for the purchase of an asset such as an auto or a house; the loan is typically secured by that asset. The originator may then “package” some or all of its consumer loans in a securitization and issue securities backed by the consumer loans. The securities are repaid by the regular payments that a consumer makes on the auto loan or mortgage and, if the consumer defaults on its loan, by the sale of the auto or house itself, if the loan is secured.

There are many reasons why an originator might securitize assets. They include:

- **Ready access to cash**
  Broadly speaking, in exchange for receiving cash today by selling ABS, the originator offers the cash flow generated by the underlying asset over the life of that asset.

- **Diversification of funding sources**
  Securitization can broaden the range of funding alternatives available to a company. In addition, at a time of financial stress or during a cyclical downturn, the asset-backed market may be relatively more open to the originator than the unsecured debt market.

- **Availability of potentially lower-cost funding**
  In certain cases, securitization may result in lower direct funding costs for a company when compared to the cost of its unsecured borrowings. This depends on the originator’s rating (a higher-rated entity may be able to borrow funds at a lower cost in the unsecured market), the quality of the receivables, and the structure of the transaction. In addition, the ability to separate a securitization from an originator’s credit profile may result in more efficient pricing and more stable spreads than for its unsecured debt.

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3. An industrial corporate may securitize the trade accounts receivables that are generated when its product is sold. These securitizations are not typically public transactions and are more commonly found in ABCP or factoring programs.
**Ability of financially weak or small market players to access funding**

Securitization enables financially weak or small companies, with little or no track record, to access cost-competitive funding. As a result, it has virtually eliminated funding --- and, therefore, financial strength --- as a barrier to entry for certain industry players. In addition, by providing greater funding availability than the unsecured capital markets, securitization helps facilitate growth, and more timely realization of operating economies of scale, for new market entrants.

**Regulatory arbitrage for banks and financial institutions**

Under certain conditions, a securitization transaction may receive off-balance-sheet treatment from an accounting perspective. This is potentially beneficial for banks and financial institutions, which are subject to regulatory capital requirements. By transferring assets in a securitization, less regulatory capital may be required to support ongoing operations.\(^4\)

**Match funding of assets and liabilities**

By mitigating interest rate risk and liquidity risk related to the mis-match of asset and liability maturities in an originator’s portfolio, securitization may provide a valuable long-term hedge. However, early amortization triggers can eliminate this benefit.

**Risk Transference**

Depending on the structure, securitization may allow the originator to transfer assets and the risk associated with those assets. As a result, some of the equity previously supporting the transferred assets can potentially be released and used for other corporate purposes. Alternatively, a reduced risk profile may result in lower unsecured borrowing costs for the originator. However, to date, we have observed very few examples of meaningful risk transference through securitization.

**Intermediaries that Structure a Securitization**

Intermediaries play a key role in structuring securitization transactions. They typically have significant expertise in structuring and placing complex ABS deals in the market. In addition, intermediaries coordinate the activities of the major players in a securitization including the issuer, originator, servicer, lawyers, rating agencies, and investors.

**Investors that Purchase ABS**

Asset-backed investors include banks, insurance companies, ABCP conduits, pension funds, and hedge funds. Since the cash flows generated from a pool of assets can be separated into various pieces or tranches, ABS offer investors a broad range of credit quality and maturities depending on the tranche that is purchased. The ratings of ABS are often as high as Aaa, a level that is frequently not attainable for the ratings on the originator’s unsecured debt.

<table>
<thead>
<tr>
<th>Investor Universe</th>
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<tbody>
<tr>
<td>Investment Companies</td>
<td>43%</td>
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<tr>
<td>Insurance Companies</td>
<td>22%</td>
</tr>
<tr>
<td>Asset Management</td>
<td>16%</td>
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<td>Federal/State/Local Government</td>
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<tr>
<td>Pension Funds</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
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Source: Moody’s

Since ABS transactions are typically backed by diversified pools of assets, fixed income investors may be able to diversify their portfolios by purchasing ABS that are, by definition, diversified. In addition, while the securitization market has not existed long enough for a judgment to be made on its performance during all economic cycles, the ratings on traditional ABS (including CDOs) since the inception of the market, have remained more stable than the ratings on originators’ unsecured borrowings.\(^8\)

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\(^4\) Note that US bank regulators have recently increased the regulatory capital requirements for some securitizers. In addition, proposed Basle II capital requirements would also reduce, but not entirely eliminate this opportunity.

\(^5\) ABCP conduits are typically bank-sponsored, special purpose entities that issue ABCP.

\(^6\) Ratings on the various tranches in securitizations can range from Aaa for the senior-most class of notes to B3 for the more subordinated tranches, although below-investment-grade ratings are less common. As the securitization market has matured, many ABS investors are willing to consider the purchase of below-investment-grade-rated bonds issued in a securitization.

\(^7\) A pool of assets supporting a securitization transaction may be diversified in several ways including the large number of receivables; the asset type (a pool may have mixed assets); the borrower type (each borrower may be employed in a different industry); the geographic mix of the borrowers; and the receivables type (a pool may consist of a mix of loans or leases). In the case of conduits, there is also diversity of the originator.

Investors may also benefit from the quality of information available in a securitization transaction. When assets are securitized, the originator generally provides disclosure of asset performance, which may be more specific than the information that the originator provides in its corporate financial statements. There is also greater transparency in terms of the originator's underwriting and servicing capabilities. Finally, since ABS transactions are typically rated, there is ongoing monitoring of performance.

**Anatomy of a Securitization**

One of the main goals of a securitization is the separation of the credit risk of the asset pool that is being securitized from the credit risk of the originator. To achieve this separation, the originator sells a specifically identified pool of assets to a Special Purpose Entity (SPE), which then issues ABS to investors. The SPE is a shell company whose sole purpose is to purchase the pool of assets from the originator with funds received through the issuance of ABS backed by the assets themselves. The balance sheet of the SPE consists of assets acquired from the originator while its liabilities are the ABS issued.

Through a “true sale” or “absolute transfer” of an asset pool to a SPE, the assets are legally separate from those of the originator. This means that if the originator files for bankruptcy protection, the unsecured creditors of the originator would not have any claim against the asset pool and its related cash flows. Conversely, asset-backed investors would not have a claim against the originator’s estate in the event of the originator’s bankruptcy. The investor looks only to the cash flows generated from the asset pool as well as credit support “built into” the transaction for repayment of the ABS – legally speaking, there is no recourse to the originator. However, in many cases, much of the credit support built into the transaction have been provided by the originator from the outset.

**Credit Support, or Enhancement, Drives Ratings for the Securitization Tranches**

An important step in structuring a securitization is determining an adequate level of credit support or enhancement. Credit enhancement protects investors against taking a loss on their securities when losses occur in the underlying asset pool. Credit enhancement brings the credit quality of the ABS being issued to the desired rating, which is typically Aaa for the senior-most tranche. In order to achieve a rating of Aaa, both structural and legal protections must also be in place.

Credit enhancement can be structured in many different forms including:

- **Subordinated tranches of securitization debt.** Typically, a securitization transaction carves up the cash flows generated from the asset pool into various pieces called tranches. A senior tranche has the first claim on the deal's cash flows while a subordinated tranche has a lower claim. The subordinated tranches provide credit enhancement by absorbing losses on the underlying asset pool before more senior tranches absorb losses.

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9. For further details on structural and legal protections, see Moody’s report entitled “Credit Analysis of Structured Securities” written by Andrew A. Silver, Ph.D. in 1991.
• **Excess spread** is defined as the interest payments and other fees received on the assets in the pool less the interest payments made on the ABS plus the fee paid to service the assets along with other expenses. Excess spread is typically the first line of defense for absorbing losses; it is tapped before any other type of credit support is used\(^{10}\). If excess spread is unused, it is generally released to the originator or trapped in a reserve account.

• **Cash reserve account.** The originator may put aside a certain amount of cash in a reserve account to absorb credit losses. As an alternative, the transaction may also be structured to capture any excess cash flow, that otherwise may have been returned to the originator, until a cash reserve account is built up to a specified level. If the reserve account is used to absorb losses, any excess cash flow may be used to replenish the reserve account to a certain level before it is released to the originator. A deal may also have performance-related triggers, which require additional cash flows to be trapped, if the quality of the underlying assets deteriorates.

• **Over-collateralization,** which is provided by the originator, results when the value of assets in the pool exceeds the amount of ABS issued. If the cash flow generated by the securitized assets is less than expected, the cash flow generated by the extra collateral is available to absorb losses.

For any securitization, most, if not all, of the losses on the asset pool are covered by one or more of these forms of credit support\(^{11}\). In many transactions, the credit support is either provided by the originator (as is the case with a cash reserve account) or retained by the originator (as is typically the case with the most subordinated tranche)\(^{12}\). As a result, depending on how a securitization is structured, most of the economic risk may have been retained by the originator. Most of the benefit of the transaction may have also been retained because if the asset pool performs as anticipated and the credit support is unutilized, all the excess cash flow is released to the originator.

In this way, the originator's retained interest in the securitization is exposed to the same risks and rewards as equity would be. That is, the originator may retain the most subordinated claim on the cash flows from the securitized asset, where most, if not all, of the losses are concentrated (this is also called the “first-loss” position). In addition, the originator only “profits” from any excess cash flow after all contractual obligations of the transaction are met.

**Servicing is a Key Consideration in Securitization**

Servicing of the asset pool --- or ensuring that all payments due on the securitized assets are received in a timely manner and defaulted receivables are liquidated --- is a key element in any securitization. Typically, the originator continues to provide servicing for the pool of assets that it securitizes\(^{13}\). In the event that servicing responsibilities must be transferred to another service\(^{14}\), the securitization is usually structured to provide adequate back-up arrangements as well as sufficient liquidity to facilitate a smooth transfer with minimal negative impact on asset performance.

**The Impact of a Securitization on the Originator’s Financial Condition**

Once a securitization is completed, the corporate analyst then considers the impact of the transaction on the originator's rating, which is discussed below.

**Securitization and Risk Transference**

Securitization began primarily as an alternate funding source for originators; only limited risk transference took place\(^{15}\). That is, the originator, as the principle source of credit enhancement or the holder of the most subordinated piece(s) of a securitization, where most of the losses from the asset pool are concentrated, remained exposed to significant credit risk. As a result, even if the assets were sold to a SPE in a “true sale” as part of a securitization, the originator's exposure to the economic risks and rewards of the assets did not change. Furthermore, originators have voluntarily stepped in to financially support under-performing securitizations, and as a result, effectively retained the economic risk of the securitized assets.

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\(^{10}\) To clarify, if a securitization has a large number of losses, the asset pool supporting the ABS will be diminished, which means that credit enhancement, including any available excess spread, will be used to replace the value of the lost assets. This is how excess spread is used to “absorb losses.”

\(^{11}\) These are **internal** forms of credit support in that they are part of the transaction. There can also be **external** credit support such as third-party guarantees of principal and interest due on the asset-backed notes.

\(^{12}\) In the former case, an originator provides a cash reserve account or can set aside proceeds received from a securitization to fund a cash reserve account. In the latter, the originator may retain the most subordinated tranche of a securitization because the tranche is too expensive to compensate investors for the risk taken.

\(^{13}\) Except for mortgage securitizations, servicing is typically performed on a “blind” basis. That is, the servicer does not know whether any particular asset has or has not been securitized, thus preventing the servicer from favoring an owned asset over a securitized asset or vice versa.

\(^{14}\) For example, servicing may be transferred if the servicer files for bankruptcy protection and is unable to carry out its responsibilities servicer.

\(^{15}\) There are few examples of securitization having been used successfully for both funding and risk transference purposes. The closest example is US conforming single family mortgage loans, where the credit risk is borne by Government Sponsored Enterprises rather than by the originator. See Moody’s report entitled “Risk Transfer in the Conforming Single-Family Mortgage Market” written by Stanislas Rouyer and others in May 1998.
Moody’s “Guiding Principle” to Determine if Risk has been Transferred

In previous research, Moody’s has laid out its “guiding principle” for determining if an originator has transferred risk in a securitization. If the rating on the securitization sold to third parties is lower than the senior unsecured rating of the originator, then risk will likely have been transferred. Conversely, if the rating is higher, it is likely that a meaningful amount of risk has not been transferred.

Said another way, if more economic resources than asset risk have been shifted to a third party, the risk profile of the originator may increase. For example, an originator’s highest-quality assets may have been sold to an SPE, leaving more risky assets, including the retained subordinated tranches of securitizations, for the unsecured creditors of the originator. This is analogous to a company that is, in effect, mortgaging its best assets. As a result, depending on the structure of the transaction, the position of the originator’s unsecured creditors could deteriorate.

What Happens to the Cash Proceeds from a Securitization?

Tracking the use of cash proceeds is a good starting point to assess the impact of a securitization on the originator’s financial condition and on its unsecured creditors. To illustrate, consider the following three scenarios, all of which assume that the originator holds most, if not all, of the risk in the securitization by retaining the subordinated interest.

Cash proceeds are invested in Treasury securities

In this scenario, the originator has effectively swapped its securitized assets for Treasury securities. However, by holding most of the risk in the securitization through the subordinated interest, the originator is exposed to the same amount of credit risk as before the securitization. From the perspective of the originator’s senior unsecured creditors, the overall risk profile of the originator has not changed.

Cash proceeds are used for debt reduction

Similar to the first scenario, the originator remains exposed to most of the credit risk by retaining the subordinated interest. On its face, a reduction in debt is a positive for the risk profile of the originator, but effectively, an amount of senior unsecured debt has been replaced with debt that is backed by a specific pool of assets. Some of the originator’s senior unsecured creditors are better off, if they are the ones that get repaid with the securitization proceeds. However, from the perspective of the remaining senior unsecured creditors, there is less asset protection than before the securitization and, at the same time, there are fewer creditors absorbing potential losses. As a result, the severity of loss has increased for them.

Cash proceeds are used to originate new assets, which are securitized

Each time new assets are securitized, the originator retains the most risky exposure to the transaction. In this scenario, the amount of debt held by the originator’s senior unsecured creditors remains the same, but creditors are exposed to more concentrated losses from an ever-increasing number of securitized pools. As a result, the senior unsecured creditors may be significantly worse off.

How Moody’s Factors Securitization Transactions into Financial Analysis of the Originator

Securitizations tend to complicate balance sheet analysis because, generally speaking, assets are removed from the originator’s balance sheet under US GAAP while the majority of the risk of the assets may remain. Nonetheless, balance sheet analysis still remains relevant as long as several adjustments are made to financial ratios. If a securitization fails to transfer meaningful risk, the securitized assets and debt are added back to the originator’s balance sheet and several financial and cash flow ratios are adjusted accordingly. In effect, Moody’s views the securitization as the equivalent of an on-balance-sheet secured financing.

16. See “Rating Methodology: Another Perspective on Risk Transfer and Securitization” written by the Securitization Standing Committee and published in July 1999.
17. Securitizations frequently have several tranches that are rated. If so, the appropriate rating for the securitization is the hypothetical rating that would be assigned if all the tranches were sold as a single-tranche security.
18. Note that Moody’s “guiding principle” applies primarily to financial institutions where credit risk --- a core business risk --- can potentially be transferred. For industrial corporates, this may not apply. Even if a securitization achieves meaningful credit risk transference, the credit risks may not be particularly relevant to the industrial corporore’s overall business risk, which is reflected in its senior unsecured rating.
20. If the originator retains the “first-loss” position in a securitization where all the losses are concentrated, most, if not all, of the transaction’s economic risk will be retained by the originator.
21. If securitizations are structured within certain parameters, the transaction receives off-balance-sheet treatment.
While a securitization may be viewed as a secured financing for analytical purposes, there are several important distinctions between securitization debt and secured borrowings from the perspective of investors. A lender that provides funding on a secured basis will be part of the bankruptcy proceedings if the originator files for bankruptcy protection. A secured creditor is in a better position than an unsecured creditor in terms of recovery, but a secured creditor will likely face the time delay of a bankruptcy filing. This is not the case for asset-backed noteholders in a securitization, where the assets are sold to the SPE and legally isolated from the originator’s bankruptcy. In addition, the assets pledged as collateral for a secured loan may not be the actual source of cash used to repay the secured creditors prior to default. Repayment will likely come from the originator’s operating cash flow rather than from the assets themselves. However, in a securitization transaction, investors are only entitled to the cash flow generated by the securitized asset. They are not entitled to any cash flow available to general unsecured creditors of the originator.

**Developments in the Securitization Market are Forging Change**

Over the last few years, the securitization market has evolved so that there is now the potential for meaningful risk transference. The main driver of this change is the ability of originators to transfer to a third party some of the risk in subordinated tranches where losses are concentrated. This can be accomplished in a number of ways including:

**Sale of Subordinated Tranches and Net Interest Margin (NIM) Bonds**

The securitization market has matured as has investors’ understanding of it. This means that there is interest among investors in purchasing the subordinated tranches of securitizations, where risk may be concentrated, in return for higher yields. Likewise, some home equity originators are monetizing excess spread in their home equity and manufactured housing deals through NIM bonds, transferring some of the speculative elements of the underlying transactions to third-party investors. Traditionally, excess spread has represented the issuer’s retained exposure to default and prepayment risk on the underlying collateral.

**Insurance and Reinsurance**

With the ability of insurance companies to price more effectively for risk, originators may be able to purchase insurance to cover risk at more reasonable prices.

**Credit Derivatives**

Originally designed to transfer corporate credit risk, credit derivatives and synthetic structures are now being deployed for hedging purposes in structured transactions with the aim of transferring risk.

While the use of these methods to transfer risk is not really new, the interpretation of the transference of risk is being taken one step further: if risk is transferred, then the equity supporting it may be allocated to other corporate purposes. This question — what is the equity benefit resulting from risk transference — is increasingly being posed to Moody’s. In response, we are developing a methodology to measure the potential equity benefit if some of the originator’s risks are successfully hedged and to assess the impact on the originator’s financial condition and ratings.

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23. For more details on the use of credit derivatives to hedge risk, refer to “Credit Derivatives and Credit Risk Management” written by Richard Cantor in December 1999.

24. We will publish additional research on the development of our methodology during 2003.
In March 2002, Moody's published a compendium entitled “Securitization and its Effect on the Credit Strength of Companies: Moody's Perspective 1987-2002”\(^{25}\), which includes the following reports:

- “Securitization and Its Effect on the Credit Strength of Financial Services Companies”, November 1996.
- “Another Perspective on Risk Transference and Securitization”, July 1999.

\(^{25}\) This publication is an update of an earlier compendium entitled “Securitization and Its Effects on the Credit Strength of Financial Services Companies: Moody’s Perspective 1987-1999” published in July 1999.
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