Securitization: Understanding the Risks and Rewards by Tarun Sabarwal

EXECUTIVE SUMMARY
Securitization creates value for organizations, investors, and consumers:
- It separates the funding of receivables from their origination and servicing, and allows origination and servicing revenues to grow without additional balance sheet financing.
- It provides cash flow and balance sheet management benefits.
- It allows for targeted asset liquidation, improvements in asset liquidity, and access to capital markets at rates different from enterprise credit ratings.
- The flexibility in transforming risks permits mutually beneficial matches in targeted market opportunities, both for organizations and investors.
- Deeper capital markets allow for price discovery of illiquid assets, greater access to funds for new firms and consumers, and greater financial innovation.
- Securitization creates risks of moral hazard and lack of transparency:
  - Separation of funding from origination can create moral hazard, generating higher-than-expected risks and leading to conflicts between investors, firm shareholders, and firm creditors.
  - Complexity of structural transformations creates lack of transparency, which, in turn, can lead to greater illiquidity and possible market failure. These effects are worse in globally interconnected markets.

INTRODUCTION
In broad terms, securitization can be viewed as pooling receivables and selling claims to these receivables in capital markets. For example, a mortgage lender may pool together thousands of mortgages and sell claims on mortgage receivables to investors. Historically, the first securitizations in the 1970s in the United States were those of pools of mortgages. With the success of mortgage-backed securities, other groups of receivables were securitized as well, including auto loan receivables, credit card receivables, and home equity receivables.

Although a majority of securitizations are of receivables on consumer debt (whether mortgage or nonmortgage), in principle, any cash flow receivable can potentially be securitized. There are several so-called "exotic" securitizations—for example, securitization of mutual fund fees, movie revenues, tobacco settlement fees, and even music royalties. Moreover, student loans, manufactured housing loans, equipment leases, and commercial mortgages are also securitized.

SECURITIZATION BASICS
Securitized products have some common characteristics. They typically involve an originator of receivables who forms a pool of receivables that is then sold to a special-purpose entity. This entity in turn issues securities backed by a beneficial interest in the receivables. For a successful securitization, it is important to understand the process in detail.

The originator of receivables identifies a pool of receivables to be securitized. For example, a mortgage lender identifies which loans will form a particular pool for a securitization. As borrower and loan characteristics affect receivables and losses on a loan, the credit quality of the receivable pool is affected by its loan quality.

The originator transfers the receivable pool to a special-purpose entity (SPE), typically a type of trust. Accounting rules govern the balance sheet treatment of such a transfer. For example, if this transfer is classified as a sale, an originator can remove these receivables from its balance sheet, but in the case of a financing, it cannot do so. Moreover, for a transfer of receivables to be a true sale, the ownership of these assets should be separated from the transferor to the extent that in the case of the transferor's bankruptcy, the transferor's creditors should not be able to access these receivables and jeopardize the beneficial interest of the investors in the securities.

The SPE issues securities backed by the collateral of receivables in the pool. Different securities (or tranches) issued on the same collateral pool may have very different risk characteristics, depending on how pool receivables are allocated to securities and depending on credit enhancements. For example, a senior tranche may have first access to pool receivables as compared to a junior or subordinate tranche, and therefore, the senior tranche would have a relatively lower risk. Similarly, a credit enhancement, such as third-party insurance of promised cash flows, lowers the credit risk of the security. Therefore, depending on the structure of the transaction, securities issued on the same collateral pool may carry different credit ratings. Over time, securitization structures have evolved in complex ways to take advantage of diversification of demands by investors.

The differential risks of these securities may change over the life of the securities. For example, credit risk for issued securities depends on the performance of the underlying collateral pool and on credit enhancements, both of which may vary over time. Important factors affecting pool performance include a lender's underwriting criteria (such as credit scores of the borrower, credit history, down payment, loan-to-value ratio, and debt service coverage ratio), economic variables (such as unemployment, economic slowdowns, and bankruptcies), and loan seasoning (payment patterns over the age of loans). Credit enhancements affect credit risk by providing more or less protection to promised cash flows for a security. Additional protection can help a security to achieve a higher credit rating, lower protection can help to create new securities with differentially desired risks, and these differential protections can help to place a security on more attractive terms. Violation of credit enhancements can trigger an "early amortization" event, which starts prepayments on securities using available SPE resources.

Therefore, pool performance evaluation, security cash flow allocation, and servicing of receivables continue on an ongoing basis. In particular, bond rating agencies assign a credit rating to each security issued by the SPE, and they evaluate this rating periodically. Moreover, for publicly issued securities, periodic financial reports are filed with regulatory agencies. The originator of receivables typically continues to service the receivables (i.e., collect payments on the receivables, manage delinquent accounts, and so on) for a fee.

BENEFITS OF SECURITIZATION
An important idea behind securitization is that it separates the funding of receivables from their origination and servicing. Such a separation can provide cash flows to...
balance sheet management benefits, structural flexibility benefits, and deeper capital markets.

Cash flow and balance sheet benefits are available to the originator mainly because selling loans in capital markets allows a lender to raise funds to originate more loans, which can again be securitized. As the originator frequently continues to service the securitized receivables, revenue from origination and servicing activities continues to grow. Moreover, as securitized assets can typically be removed from the balance sheet, the net balance sheet effect is zero. In this sense, securitization improves revenues without additional balance sheet financing. A securitization can also improve balance sheet liquidity by converting long-term and illiquid receivables into funds that can be used for additional value-generating investments. A securitization can also help to manage concentration ratios between assets and liabilities. Finally, to the extent allowable, selective securitizations of receivables can allow for regulatory capital arbitrage.

Structural benefits from securitization arise from the flexibility available in transforming cash flows and risks of the collateral pool into those of the securities issued on the pool. For example, creative use of credit enhancements allows relatively poor-quality receivables, such as subprime loans, to be transformed into some tranches of high credit quality and other tranches of low credit quality. Similarly, it is possible to carve out long-term, nonmaturities from short-term, revolving credit card receivables.

Structural flexibility allows originators and investors to tailor securitizations to their needs. Originators can sell particular assets with greater liquidity if these assets can be transformed creatively into securities desired by investors. Similarly, investors with particular needs may have more choices if different originators innovate to serve their needs.

In principle, deeper capital markets may arise from improved cash flows, better balance sheet management, and greater structural flexibility. A securitization of high-quality assets may allow a relatively young firm or a firm with a lower credit rating to access capital market funds at lower cost than would otherwise be available. Securitization may facilitate market price discovery of illiquid assets. It allows for the sale of precisely identified assets to be independent of the asset owner's financial condition. It allows greater financial innovation and better matching of sellers and buyers, and it may allow for deeper debt market penetration by opening newer lending markets, such as subprime lending.

**RISKS OF SECURITIZATION**

While the unique characteristics of securitizations are capable of providing benefits, they create additional risks as well. When standard cash flow risks are combined with the separation of funding of receivables from their origination and servicing, this may produce unintended consequences. For example, if repayment behavior is significantly worse than expected, investors may be concerned about moral hazard; that is, receivables in the collateral pool were "cherry-picked," and investors may require additional support for the securities. In extreme circumstances, investors may require the originator to provide an explicit guarantee or to take back poorly performing collateral (sometimes termed moral recourse). As the collateral pool is off the originator's balance sheet, recognizing poorly performing assets jeopardizes the originator's financial condition, and such actions will be resisted by the originator's stockholders and bondholders. Similarly, if the originator is in a poor financial condition, its creditors might consider going after assets that are securitized and off the originator's balance sheet. This can jeopardize investor claims on the collateral pool and question the legitimacy of the bankruptcy-remoteness of the SPE. Moreover, a narrow focus on origination can create an incentive to over-originate (or overextend) loans to marginally less creditworthy borrowers.

The structural flexibility in transforming collateral pool characteristics into very different security characteristics, while arguably a great benefit of securitization, also has the potential to create great risks.

The more complex the structure, the greater is lack of transparency, and the harder it is to analyze and forecast security performance. For example, consider long-term securities collateralized by short-term credit card receivables. These are naturally exposed to amortization risk due to a mismatch between cash flow receipts on the receivables and cash flow payments on the securities. Add to this a senior-subordinated security structure. Now add third-party insurance, and finally add

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**CASE STUDY**

The growth of subprime lending in the United States started around the mid-1990s. A subprime borrower typically has some combination of a blemished credit history, a relatively short credit history, poorly documented income prospects, and an uncertain repayment ability.

Before the 1990s, subprime borrowers typically found it hard to qualify for bank loans. During the second half of the 1990s, in the face of relatively low interest rates, investors were more willing to seek opportunities with higher yields that came with a greater, but manageable, degree of risk.

Securitization of consumer debt receivables helped to connect these two sides, with finance companies serving as intermediaries. Improvements in credit reporting and statistical analyses facilitated the development of risk-scoring models to lend profitably to subprime borrowers. Credit enhancements and structured tranches created securities that addressed investor needs.

The success of initial securitizations fueled rapid growth in securitizations. Debt markets deepened to provide loans to subprime borrowers, finance companies found an attractive source of new financing, and could continue to increase revenues from profitable origination and servicing fees, investors found securities with desirable characteristics, rating agencies generated additional fees, and third-party insurers generated additional premiums.

In a span of about ten years, concerns started to arise as securitized products became exceedingly complex, with the introduction of collateralized debt obligations (CDOs), and of CDOs of CDOs, or "CDO-squared," lending started to look indiscriminate, with concerns about real estate appraisals, and about lack of adequately documented repayment ability: and real estate prices appeared to defy historical trends. As the US economy slowed and house prices lowered, and as delinquencies and foreclosures on subprime debt rose, the value of securities backed by subprime receivables deteriorated. The complexity and opacity of the securitization structures exacerbated the problem by making it virtually impossible to put a reliable value on these securities. This led to a crisis of confidence that paralyzed trade in some of these securities. Markdowns in the value of such securities started to hemorrhage balance sheets of security holders, especially some hedge funds, and led to the first casualty of a titan on Wall Street, Bear Stearns, in March 2008.
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subprime credit card receivables, which, because of their recent issues, come with greater uncertainty about their performance. The riskiness of securities based on such structural transformations depends in a complex manner on many factors, and a reliable evaluation of that risk may be very hard to obtain, if it can be obtained at all.

Lack of transparency is made worse when the collateral pool in a securitization has opaque or otherwise hard-to-value assets. As, in principle, any receivable can be securitized, a security that was created as a result of securitization can be used further in a new collateral pool to issue new securities. As the initial security is hard to analyze, when several such securities are pooled together and then tranched off again, it is not surprising that there are cases where a final security is inscrutable, even with the most sophisticated analysis.

A complex security, by and of itself, is not an insurmountable obstacle to reap the rewards of securitization. But in uncertain times, complexity combined with lack of transparency may throw wrenches in the wheels of smoothly operating markets. In other words, if reliable information is unavailable, market participants may be unwilling to pay high prices for securities that may turn out to be bad investments, and this can lead to a crisis of confidence severe enough that trade in particular securities grinds to a halt. Moreover, interconnected debtors and creditors may serve to exacerbate such a problem by extending it to other securities. Such a dynamic has been mentioned as a core problem resulting in global credit market disruptions that started in the United States in 2007.

**CONCLUSION**

No doubt, securitization presents new developments and exciting opportunities. Securitization allows for more precise targeting of asset liquidation. It can create value for originators and investors. It can deepen capital markets, thereby providing funds for new borrowers and new businesses. And it can improve market price discovery for illiquid assets.

When a securitization gets beyond the analytical apparatus of market participants, however, it is capable of destroying value. The potential harm is greater in globally inter-connected markets.

**MAKING IT HAPPEN**

Executives may find it useful to keep in mind the following key ingredients to a successful securitization.

- Characteristics of assets to be securitized should be documented well and identified clearly.
- Transfer of assets to a SPE to form a collateral pool should be a true, bankruptcy-remote sale.
- The transformation of collateral pool risks into security risks should be simple enough to provide clear and robust analysis of the dependence of security risks on collateral performance.
- Processes for servicing, and for ongoing monitoring of collateral and security performance, should be well-defined, with some evidence of success under reliability testing.
- Using collateral, securities, and structures with an established history or clear evidence of success provides greater liquidity in security trading, and more reliable analysis of collateral performance.
- Using opaque and exotic structures requires considerable expertise and comes with greater risks.

**MORE INFO**

Book:

Reports:

Websites:
The American Securitization Forum: www.americansecuritization.com
The European Securitisation Forum: www.europeansecuritisation.com

**NOTES**

1 Consumer debt is used here in a broad sense, including securable debt (such as home mortgages, auto loans, manufactured home loans, and so on) and unsecured debt (such as credit cards, student loans, and so on).
2 Although the principles outlined here apply to all securitizations, for concreteness, specifics are presented for consumer receivable securitizations.
3 This feature is sometimes termed bankruptcy-remoteness.
5 Such risks include underwriting risk, interest rate risk, default risk, prepayment risk, and moral hazard risk.
6 This is usually addressed by having a reserve period and an accumulation period when cash flow receipts are kept aside for use later in making promised payments on the securities.
7 Collateralized debt obligations (CDOs) typically have such a structure.

"There is no human feeling to the US securities markets and sometimes no discernible evidence of human intelligence either. But they work." Robert J. Eaton