

# Securitization

Securitization is a structured finance process that distributes risk by aggregating debt instruments in a pool, then issues new securities backed by the pool. The term "Securitization" is derived from the fact that the forms of financial instruments used to obtain funds from the investors are securities. As a portfolio risk backed by amortizing cash flows - and unlike general corporate debt - the credit quality of securitized debt is non-stationary due to changes in volatility that are time and structure-dependent. If the transaction is properly structured and the pool performs as expected, the credit risk of all tranches of structured debt improves; if improperly structured, the affected tranches will experience dramatic credit deterioration and loss. All assets can be securitized so long as they are associated with cash flow. Hence, the securities which are the outcome of Securitization processes are termed asset-backed securities (ABS). From this perspective, Securitization could also be defined as a financial process leading to an issue of an ABS.

Securitizations often utilizes a special purpose vehicle (SPV), alternatively known as a special purpose entity (SPE) or special purpose company (SPC), reducing the risk of bankruptcy and thereby obtaining lower interest rates from potential lenders. A credit derivative is also sometimes used to change the credit quality of the underlying portfolio so that it will be acceptable to the final investors. Securitizations has evolved from its tentative beginnings in the late 1970s to a vital funding source with an estimated outstanding of \$10.24 trillion in the United States and \$2.25 trillion in Europe as of the 2nd quarter of 2008. In 2007, ABS issuance amounted to \$3,455 billion in the US and \$652 billion in Europe.

## Overview

Securitization, in its most basic form, is a method of financing assets. Rather than selling those assets "whole," the assets are combined into a pool, and then that pool is split into shares. Those shares are sold to investors who share the risk and reward of the performance of those assets. It can be viewed as being similar to a corporation selling, or "spinning off," a profitable business unit into a separate entity. They trade their ownership of that unit, and all the profit and loss that might come in the future, for cash right now. A very basic example would be as follows. XYZ Bank loans 10 people \$100,000 a piece, which they will use to buy homes. XYZ has invested in the success and/or failure of those 10 home buyers- if the buyers make their payments and pay off the loans, XYZ makes a profit. Looking at it another way, XYZ has taken the risk that some borrowers won't repay the loan. In exchange for taking that risk, the borrowers pay XYZ a premium in addition to the interest on the money they borrow. XYZ will then take these ten loans, and put them in a pool. They will sell this pool to a larger investor, ABC (typically the SPV). ABC will then split this pool (which consists of high risk loans and low risk loans) into equal pieces. The pieces will then be sold to other smaller investors (as bonds).

## History

"Asset Securitizations began with the structured financing of mortgage pools in the 1970s. For decades before that, banks were essentially portfolio lenders; they held loans until they matured or were paid off. These loans were funded principally by deposits, and sometimes by debt, which was a direct obligation of the bank (rather than a claim on specific assets). But after World War II, depository institutions simply could not keep pace with the rising demand for housing credit. Banks, as well as other financial intermediaries sensing a market opportunity, sought ways of increasing the sources of mortgage funding. To attract investors, investment bankers eventually developed an investment vehicle that isolated defined mortgage pools, segmented the credit risk, and structured the cash flows from the underlying loans. Although it took several years to develop efficient mortgage Securitizations structures, loan originators quickly realized the process was readily transferable to other types of loans as well."

In February 1970, the U.S. Department of Housing and Urban Development created the transaction using a mortgage-backed security. The Government National Mortgage Association (GNMA or Ginnie Mae) sold securities backed by a portfolio of mortgage loans.

To facilitate the Securitizations of non-mortgage assets, businesses substituted private credit enhancements. First, they over-collateralized pools of assets; shortly thereafter, they improved third-party and structural enhancements. In 1985, Securitizations techniques that had been developed in the mortgage market were applied for the first time to a class of non-mortgage assets — automobile loans. A pool of assets second only to mortgages in volume, auto loans were a good match for structured finance; their maturities, considerably shorter than those of mortgages, made the timing of cash flows more predictable, and their long statistical histories of performance gave investors confidence.

This early auto loan deal was a \$60 million Securitizations originated by Marine Midland Bank and securitized in 1985 by the Certificate for Automobile Receivables Trust (CARS, 1985-1)

The first significant bank credit card sale came to market in 1986 with a private placement of \$50 million of outstanding bank card loans. This transaction demonstrated to investors that, if the yields were high enough, loan pools could support asset sales with higher expected losses and administrative costs than was true within the mortgage market. Sales of this type — with no contractual obligation by the seller to provide recourse — allowed banks to receive sales treatment for accounting and regulatory purposes (easing balance sheet and capital constraints), while at the same time allowing them to retain origination and servicing fees. After the success of this initial transaction, investors grew to accept credit card receivables as collateral, and banks developed structures to normalize the cash flows.

Starting in the 1990s with some earlier private transactions, Securitizations technology was applied to a number of sectors of the reinsurance and insurance

markets including life and catastrophe. This activity grew to nearly \$15bn of issuance in 2006 following the disruptions in the underlying markets caused by Hurricane Katrina and Regulation XXX. Key areas of activity in the broad area of Alternative Risk Transfer include catastrophe bonds, Life Insurance Securitization and Reinsurance Sidecars.

The first public Securitizations of Community Reinvestment Act (CRA) loans started in 1997. CRA loans are loans targeted to low and moderate income borrowers and neighborhoods.

As estimated by the Bond Market Association, in the United States, total amount outstanding at the end of 2004 at \$1.8 trillion. This amount is about 8 percent of total outstanding bond market debt (\$23.6 trillion), about 33 percent of mortgage-related debt (\$5.5 trillion), and about 39 percent of corporate debt (\$4.7 trillion) in the United States. In nominal terms, over the last ten years, (1995-2004,) ABS amount outstanding has grown about 19 percent annually, with mortgage-related debt and corporate debt each growing at about 9 percent. Gross public issuance of asset-backed securities remains strong, setting new records in many years. In 2004, issuance was at an all-time record of about \$0.9 trillion.

At the end of 2004, the larger sectors of this market are credit card-backed securities (21 percent), home-equity backed securities (25 percent), automobile-backed securities (13 percent), and collateralized debt obligations (15 percent). Among the other market segments are student loan-backed securities (6 percent), equipment leases (4 percent), manufactured housing (2 percent), small business loans (such as loans to convenience stores and gas stations), and aircraft leases. More recently an attempt to securitize excess energy generated by renewable energy resources is being attempted by Joseph Brant Arseneau and his team.

Securitizations only reached Europe in late 80's, when the first Securitizations of mortgages appeared in the UK. This technology only really took off in the late 90's or early 2000, thanks to the innovative structures implemented across the asset classes, such as UK Mortgage Master Trusts (concept imported from the US Credit Cards), Insurance-backed transaction (such as the ones implemented by the insurance Securitizations guru Emmanuel Issanchou) or even more esoteric asset classes (for example Securitizations of lottery receivables for the Greek government, executed by Philippe Tapernoux).

As the result of the credit crunch precipitated by the subprime mortgage crisis the market for bonds backed by securitized loans was very weak in 2008 unless the bonds were guaranteed by a federally backed agency. As a result interest rates are rising for loans that were previously securitized such as home mortgages, student loans, auto loans and commercial mortgages.

## Structure

### Pooling and transfer

The **originator** initially owns the assets engaged in the deal. This is typically a company looking to raise capital, restructure debt or otherwise adjust its finances. Under traditional corporate finance concepts, such a company would have three options to raise new capital: a loan, bond issue, or issuance of stock. However, stock offerings dilute the ownership and control of the company, while loan or bond financing is often prohibitively expensive due to the credit rating of the company and the associated rise in interest rates.

The consistently revenue-generating part of the company may have a much higher credit rating than the company as a whole. For instance, a leasing company may have provided \$10m nominal value of leases, and it will receive a cash flow over the next five years from these. It cannot demand early repayment on the leases and so cannot get its money back early if required. If it could sell the rights to the cash flows from the leases to someone else, it could transform that income stream into a lump sum today (in effect, receiving today the present value of a future cash flow). Where the originator is a bank or other organization that must meet capital adequacy requirements, the structure is usually more complex because a separate company is set up to buy the assets.

A suitably large portfolio of assets is "pooled" and transferred to a "**special purpose vehicle**" or "**SPV**" (the **issuer**), a tax-exempt company or trust formed for the specific purpose of funding the assets. Once the assets are transferred to the issuer, there is normally no recourse to the originator. The issuer is "bankruptcy remote," meaning that if the originator goes into bankruptcy, the assets of the issuer will not be distributed to the creditors of the originator. In order to achieve this, the governing documents of the issuer restricts its activities to only those necessary to complete the issuance of securities.

Accounting standards govern when such a transfer is a sale, a financing, a partial sale, or a part-sale and part-financing. In a sale, the originator is allowed to remove the transferred assets from its balance sheet: in a financing, the assets are considered to remain the property of the originator. Under US accounting standards, the originator achieves a sale by being at arm's length from the issuer, in which case the issuer is classified as a "**qualifying special purpose entity**" or "**qSPE**".

Because of these structural issues, the originator typically needs the help of an investment bank (the **arranger**) in setting up the structure of the transaction.

### Issuance

To be able to buy the assets from the originator, the issuer SPV issues tradable securities to fund the purchase. Investors purchase the securities, either through a

private offering (targeting institutional investors) or on the open market. The performance of the securities is then directly linked to the performance of the assets. Credit rating agencies rate the securities which are issued in order to provide an external perspective on the liabilities being created and help the investor make a more informed decision.

In transactions with static assets, a **depositor** will assemble the underlying collateral, help structure the securities and work with the financial markets in order to sell the securities to investors. The depositor has taken on added significance under Regulation AB. The depositor typically owns 100% of the beneficial interest in the issuing entity and is usually the parent or a wholly owned subsidiary of the parent which initiates the transaction. In transactions with managed (traded) assets, **asset managers** assemble the underlying collateral, help structure the securities and work with the financial markets in order to sell the securities to investors.

Some deals may include a third-party **guarantor** which provides guarantees or partial guarantees for the assets, the principal and the interest payments, for a fee.

The securities can be issued with either a fixed interest rate or a floating rate. Fixed rate ABS set the “coupon” (rate) at the time of issuance, in a fashion similar to corporate bonds. Floating rate securities may be backed by both amortizing and non-amortizing assets. In contrast to fixed rate securities, the rates on “floaters” will periodically adjust up or down according to a designated index such as a U.S. Treasury rate, or, more typically, the London Interbank Offered Rate (LIBOR). The floating rate usually reflects the movement in the index plus an additional fixed margin to cover the added risk

## **Credit enhancement and tranching**

Unlike conventional corporate bonds which are unsecured, securities generated in a Securitizations deal are "credit enhanced," meaning their credit quality is increased above that of the originator's unsecured debt or underlying asset pool. This increases the likelihood that the investors will receive cash flows to which they are entitled, and thus causes the securities to have a higher credit rating than the originator. Some Securitizations use external credit enhancement provided by third parties, such as surety bonds and parental guarantees (although this may introduce a conflict of interest).

Individual securities are often split into **tranches**, or categorized into varying degrees of subordination. Each tranche has a different level of credit protection or risk exposure than another: there is generally a senior (“A”) class of securities and one or more junior subordinated (“B,” “C,” etc.) classes that function as protective layers for the “A” class. The senior classes have first claim on the cash that the SPV receives, and the more junior classes only start receiving repayment after the more senior classes have repaid. Because of the cascading effect between classes, this arrangement is often referred to as a **cash flow waterfall**. In the event that the underlying asset pool becomes insufficient to make payments on the securities (e.g. when loans default within a portfolio of loan claims), the loss is absorbed first by the

subordinated tranches, and the upper-level tranches remain unaffected until the losses exceed the entire amount of the subordinated tranches. The senior securities are typically AAA rated, signifying a lower risk, while the lower-credit quality subordinated classes receive a lower credit rating, signifying a higher risk.

The most junior class (often called the **equity class**) is the most exposed to payment risk. In some cases, this is a special type of instrument which is retained by the originator as a potential profit flow. In some cases the equity class receives no coupon (either fixed or floating), but only the residual cash flow (if any) after all the other classes have been paid.

There may also be a special class which absorbs early repayments in the underlying assets. This is often the case where the underlying assets are mortgages which, in essence, are repaid every time the property is sold. Since any early repayment is passed on to this class, it means the other investors have a more predictable cash flow.

If the underlying assets are mortgages or loans, there are usually two separate "waterfalls" because the principal and interest receipts can be easily allocated and matched. But if the assets are income-based transactions such as rental deals it is not possible to differentiate so easily between how much of the revenue is income and how much principal repayment. In this case all the income is used to pay the cash flows due on the bonds as those cash flows become due.

Credit enhancements affect credit risk by providing more or less protection to promised cash flows for a security. Additional protection can help a security achieve a higher rating, lower protection can help create new securities with differently desired risks, and these differential protections can help place a security on more attractive terms.

In addition to subordination, credit may be enhanced through:

- A **reserve** or **spread account**, in which funds remaining after expenses such as principal and interest payments, charge-offs and other fees have been paid-off are accumulated, and can be used when SPE expenses are greater than its income.
- Third-party insurance or guarantees of principal and interest payments on the securities.
- **Over-collateralization**, usually by using finance income to pay off principal on some securities before principal on the corresponding share of collateral is collected.
- **Cash funding** or a **cash collateral account**, generally consisting of short-term, highly rated investments purchased either from the seller's own funds, or from funds borrowed from third parties that can be used to make up shortfalls in promised cash flows.
- A third-party **letter of credit** or corporate guarantee.

- A back-up servicer for the loans.
- Discounted receivables for the pool.

## **Servicing**

A **servicer** collects payments and monitors the assets that are the crux of the structured financial deal. The servicer can often be the originator, because the servicer needs very similar expertise to the originator and would want to ensure that loan repayments are paid to the Special Purpose Vehicle.

The servicer can significantly affect the cash flows to the investors because it controls the collection policy, which influences the proceeds collected, the charge-offs and the recoveries on the loans. Any income remaining after payments and expenses is usually accumulated to some extent in a reserve or spread account, and any further excess is returned to the seller. Bond rating agencies publish ratings of asset-backed securities based on the performance of the collateral pool, the credit enhancements and the probability of default.

When the issuer is structured as a trust, the trustee is a vital part of the deal as the gate-keeper of the assets that are being held in the issuer. Even though the trustee is part of the SPV, which is typically wholly owned by the Originator, the trustee has a fiduciary duty to protect the assets and those who own the assets, typically the investors.

## **Repayment structures**

Unlike corporate bonds, most Securitizations are amortized, meaning that the principal amount borrowed is paid back gradually over the specified term of the loan, rather than in one lump sum at the maturity of the loan. Fully amortizing Securitizations are generally collateralized by fully amortizing assets such as home equity loans, auto loans, and student loans. Prepayment uncertainty is an important concern with fully amortizing ABS. The possible rate of prepayment varies widely with the type of underlying asset pool, so many prepayment models have been developed in an attempt to define common prepayment activity. The PSA prepayment model is a well-known example.

A controlled amortization structure is a method of providing investors with a more predictable repayment schedule, even though the underlying assets may be non-amortizing. After a predetermined “revolving” period, during which only interest payments are made, these Securitizations attempt to return principal to investors in a series of defined periodic payments, usually within a year. An early amortization event is the risk of the debt being retired early.

On the other hand, **bullet** or **slug** structures return the principal to investors in a single payment. The most common bullet structure is called the **soft bullet**, meaning that the final bullet payment is not guaranteed on the expected maturity date;

however, the majority of these Securitizations are paid on time. The second type of bullet structure is the **hard bullet**, which guarantees that the principal will be paid on the expected maturity date. Hard bullet structures are less common for two reasons: investors are comfortable with soft bullet structures, and they are reluctant to accept the lower yields of hard bullet securities in exchange for a guarantee.

Securitizations are often structured as a sequential pay bond, paid off in a sequential manner based on maturity. This means that the first tranche, which may have a one-year average life, will receive all principal payments until it is retired; then the second tranche begins to receive principal, and so forth. Pro rata bond structures pay each tranche a proportionate share of principal throughout the life of the security.

### **Structural Risks and Miss-incentives/ Disincentives**

Originators (e.g. of mortgages) have less incentive towards credit quality and greater incentive towards loan volume since they do not bear the long-term risk of the assets they have created and may simply profit by the fees associated with origination and securitization.

### **Special types of securitization**

#### **Master trust**

A master trust is a type of SPV particularly suited to handle revolving credit card balances, and has the flexibility to handle different securities at different times. In a typical master trust transaction, an originator of credit card receivables transfers a pool of those receivables to the trust and then the trust issues securities backed by these receivables. Often there will be many tranching securities issued by the trust all based on one set of receivables. After this transaction, typically the originator would continue to service the receivables, in this case the credit cards.

There are various risks involved with master trusts specifically. One risk is that timing of cash flows promised to investors might be different from timing of payments on the receivables. For example, credit card-backed securities can have maturities of up to 10 years, but credit card-backed receivables usually pay off much more quickly. To solve this issue these securities typically have a revolving period, an accumulation period, and an amortization period. All three of these periods are based on historical experience of the receivables. During the revolving period, principal payments received on the credit card balances are used to purchase additional receivables. During the accumulation period, these payments are accumulated in a separate account. During the amortization period, new payments are passed through to the investors.

A second risk is that the total investor interests and the seller's interest are limited to receivables generated by the credit cards, but the seller (originator) owns the accounts. This can cause issues with how the seller controls the terms and conditions of the accounts. Typically to solve this, there is language written into the Securitizations to protect the investors.

A third risk is that payments on the receivables can shrink the pool balance and under-collateralize total investor interest. To prevent this, often there is a required minimum seller's interest, and if there was a decrease then an early amortization event would occur.

### **Issuance trust**

In 2000, Citibank introduced a new structure for credit card-backed securities, called an issuance trust, which does not have limitations, that master trusts sometimes do, that requires each issued series of securities to have both a senior and subordinate tranche. There are other benefits to an issuance trust: they provide more flexibility in issuing senior/subordinate securities, can increase demand because pension funds are eligible to invest in investment-grade securities issued by them, and they can significantly reduce the cost of issuing securities. Because of these issues, issuance trusts are now the dominant structure used by major issuers of credit card-backed securities.

### **Grantor trust**

Grantor trusts are typically used in automobile-backed securities and REMICs (Real Estate Mortgage Investment Conduits). Grantor trusts are very similar to pass-through trusts used in the earlier days of Securitization. An originator pools together loans and sells them to a grantor trust, which issues classes of securities backed by these loans. Principal and interest received on the loans, after expenses are taken into account, are passed through to the holders of the securities on a pro-rata basis.

### **Owner trust**

In an owner trust, there is more flexibility in allocating principal and interest received to different classes of issued securities. In an owner trust, both interest and principal due to subordinate securities can be used to pay senior securities. Due to this, owner trusts can tailor maturity, risk and return profiles of issued securities to investor needs. Usually, any income remaining after expenses is kept in a reserve account up to a specified level and then after that, all income is returned to the seller. Owner trusts allow credit risk to be mitigated by over-collateralization by using excess reserves and excess finance income to prepay securities before principal, which leaves more collateral for the other classes.

## **Motives for Securitization**

### **Advantages to issuer**

**Reduces funding costs:** Through Securitization, a company rated BB but with AAA worthy cash flow would be able to borrow at possibly AAA rates. This is the number one reason to securitize a cash flow and can have tremendous impacts on borrowing costs. The difference between BB debt and AAA debt can be multiple hundreds of basis points. For example, Moody's downgraded Ford Motor Credit's rating in January 2002, but senior automobile backed securities, issued by Ford Motor Credit in January 2002 and April 2002, continue to be rated AAA because of the strength of the underlying collateral and other credit enhancements.

**Reduces asset-liability mismatch:** Depending on the structure chosen, Securitizations can offer perfect matched funding by eliminating funding exposure in terms of both duration and pricing basis. Essentially, in most banks and finance companies, the liability book or the funding is from borrowings. This often comes at a high cost. Securitization allows such banks and finance companies to create a self-funded asset book.

**Lower capital requirements:** Some firms, due to legal, regulatory, or other reasons, have a limit or range that their leverage is allowed to be. By securitizing some of their assets, which qualify as a sale for accounting purposes, these firms will be able to lessen the equity on their balance sheets while maintaining the "earning power" of the asset.

**Locking in profits:** The total profits have not yet emerged and thus remain uncertain for given block of business. Once the block has been securitized, the level of profits has now been locked in for that company, thus the risk of profit not emerging, or the benefit of super-profits, has now been passed on.

**Transfer risks** (credit, liquidity, prepayment, reinvestment, asset concentration): Securitizations makes it possible to transfer risks from an entity that does not want to bear it, to one that does. Two good example of this are catastrophe bonds and Entertainment Securitizations. Similarly, by securitizing a block of business (thereby locking in a degree of profits), the company has effectively freed up its balance to go out and write more profitable business.

**Off balance sheet:** Derivatives of many types have in the past been referred to as "off-balance-sheet." This term implies that the use of derivatives has no balance sheet impact. While there are differences among the various accounting standards internationally, there is a general trend towards the requirement to record derivatives at fair value on the balance sheet. There is also a generally accepted principle that, where derivatives are being used as a hedge against underlying assets or liabilities, accounting adjustments are required to ensure that the gain/loss on the hedged instrument is recognized in the income statement on a similar basis as the underlying assets and liabilities. Certain credit derivatives products, particularly Credit Default Swaps, now have more or less universally accepted market standard documentation. In the case of Credit Default Swaps, this documentation has been formulated by the

International Swaps and Derivatives Association (ISDA) who have for long time provided documentation on how to treat such derivatives on balance sheets.

**Earnings:** Securitizations makes it possible to record an earnings bounce without any real addition to the firm. When Securitizations takes place, there often is a "true sale" that takes place between the Originator (the parent company) and the SPE. This sale has to be for the market value of the underlying assets for the "true sale" to stick and thus this sale is reflected on the parent company's balance sheet, which will boost earnings for that quarter by the amount of the sale. While not illegal in any respect, this does distort the true earnings of the parent company.

**Admissibility:** Future cash flows may not get full credit in a company's accounts (life insurance companies, for example, may not always get full credit for future surpluses in their regulatory balance sheet), and a Securitizations effectively turns an admissible future surplus flow into an admissible immediate cash asset.

**Liquidity:** Future cash flows may simply be balance sheet items which currently are not available for spending, whereas once the book has been securitized, the cash would be available for immediate spending or investment. This also creates a reinvestment book which may well be at better rates.

#### **Disadvantages to issuer**

**May reduce portfolio quality:** If the AAA risks, for example, are being securitized out, this would leave a materially worse quality of residual risk.

**Costs:** Securitizations are expensive due to management and system costs, legal fees, underwriting fees, rating fees and ongoing administration. An allowance for unforeseen costs is usually essential in Securitizations, especially if it is an atypical Securitization.

**Size limitations:** Securitizations often require large scale structuring, and thus may not be cost-efficient for small and medium transactions.

**Risks:** Since Securitizations is a structured transaction, it may include par structures as well as credit enhancements that are subject to risks of impairment, such as prepayment, as well as credit loss, especially for structures where there are some retained strips.

#### **Advantages to investors**

##### **Opportunity to potentially earn a higher rate of return (on a risk-adjusted basis)**

**Opportunity to invest in a specific pool of high quality credit-enhanced assets:** Due to the stringent requirements for corporations (for example) to attain high ratings, there is a dearth of highly rated entities that exist. Securitizations, however, allow for the creation of large quantities of AAA, AA or A rated bonds, and risk adverse institutional investors, or investors that are required to invest in only highly rated assets have access to a larger pool of investment options.

**Portfolio diversification:** Depending on the Securitization, hedge funds as well as other institutional investors tend to like investing in bonds created through Securitizations because they may be uncorrelated to their other bonds and securities.

**Isolation of credit risk from the parent entity:** Since the assets that are securitized are isolated (at least in theory) from the assets of the originating entity, under Securitizations it may be possible for the Securitizations to receive a higher credit rating than the "parent," because the underlying risks are different. For example, a small bank may be considered more risky than the mortgage loans it makes to its customers; were the mortgage loans to remain with the bank, the borrowers may effectively be paying higher interest (or, just as likely, the bank would be paying higher interest to its creditors, and hence less profitable).

### **Risks to investors**

**Liquidity risk:** **liquidity risk** is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit).

**Credit/default:** Default risk is generally accepted as a borrower's inability to meet interest payment obligations on time. For ABS, default may occur when maintenance obligations on the underlying collateral are not sufficiently met as detailed in its prospectus. A key indicator of a particular security's default risk is its credit rating. Different tranches within the ABS are rated differently, with senior classes of most issues receiving the highest rating, and subordinated classes receiving correspondingly lower credit ratings.

However, the credit crisis of 2007-2008 has exposed a potential flaw in the Securitization process - loan originators retain no residual risk for the loans they make, but collect substantial fees on loan issuance and Securitization, which doesn't encourage improvement of underwriting standards.

### **Event risk**

**Prepayment/reinvestment/early amortization:** The majority of revolving ABS are subject to some degree of early amortization risk. The risk stems from specific early amortization events or payout events that cause the security to be paid off prematurely. Typically, payout events include insufficient payments from the underlying borrowers, insufficient excess Fixed Income Sectors: Asset-Backed Securities spread, a rise in the default rate on the underlying loans above a specified level, a decrease in credit enhancements below a specific level, and bankruptcy on the part of the sponsor or servicer.

**Currency interest rate fluctuations:** Like all fixed income securities, the prices of fixed rate ABS move in response to changes in interest rates. Fluctuations in interest rates affect floating rate ABS prices less than fixed rate securities, as the index against which the ABS rate adjusts will reflect interest rate changes in the economy. Furthermore, interest rate changes may affect the prepayment rates on underlying loans that back some types of ABS, which can affect yields. Home equity loans tend to be the most sensitive to changes in interest rates, while auto loans, student loans, and credit cards are generally less sensitive to interest rates.

## **Contractual agreements**

**Moral hazard:** Investors usually rely on the deal manager to price the Securitizations' underlying assets. If the manager earns fees based on performance, there may be a temptation to mark up the prices of the portfolio assets. Conflicts of interest can also arise with senior note holders when the manager has a claim on the deal's excess spread.

**Servicer risk:** The transfer or collection of payments may be delayed or reduced if the servicer becomes insolvent. This risk is mitigated by having a backup servicer involved in the transaction.

## **Recent Lawsuits**

Recently there have been several lawsuits attributable to the rating of Securitizations by the three leading rating agencies. In July, 2009, the USA's largest public pension fund has filed suit in California state court in connection with \$1 billion in losses that it says were caused by "wildly inaccurate" credit ratings from the three leading ratings agencies.