**What Assets?**

- Mortgages
- Consumer receivables
  - Auto
  - Credit Card
  - Cellphone
- Commercial receivables
  - Customer A/R
  - Leases
- Infrastructure revenues
  ...and many new forms

**Example: Auto-Receivables Backed Securities**

In the USA, auto ABS generally have the following characteristics:

1. A fixed coupon, with principal and interest paid monthly;
2. Either a "pass-through" or a "pay-through" structure; "fixed-payment" structures have also been used (separating payment from prepayments on the underlying loan pools);
3. Weighted average issues generally run 1 to 3 years and final maturities 3 to 5 years;
4. Credit protection generally covers losses up to a fixed percentage of the pool balance, either via an issuer guarantee, insurance, or a letter of credit from a bank;
5. Prepayment rates increase as the loans age;
6. Prepayment rates tend to vary little with interest rates. And the short-term nature of the loans dampens the impact of any change in the prepayment level. Thus they do not present the "negative convexity" problems of mortgage-backed securities. Turnover resulting from sales and trade-ins is by far the largest cause of prepayment; refinancing is rare.
Collateralized Bonds

Collateralized bonds are the form most similar to traditional asset-based borrowing. The owner of assets borrows money and pledges assets to secure repayment. The assets pledged may be measured according to their market value upon sale or their ability to generate a cash flow stream. The debt instrument issued need not match the cash flow configuration of any of the assets pledged. Since the borrower is the corporate entity pledging the assets, shelf registration of public issues is possible.

In this structure, overcollateralization—pledging more assets than the face value of debt issued to insure repayment—is often the most practical means of credit enhancement. When asset value rather than cash flow is used to establish required amounts of collateral, this is usually done on a mark-to-market basis to ensure debt payment coverage. This method of payment coverage is also used in some asset-backed preferred stock issues.

Since the direct issuance of collateralized debt does not achieve any of the capital saving aspects of a sale of assets, this structure of asset-backed security is usually used to achieve a lower cost of debt or preferred stock than an issuer could otherwise achieve.

Pass-Through Securities: Initial Flows

The simplest way to securitize assets with a regular cash flow is to sell direct participations in the pool of assets. In other words, a pass-through certificate represents an ownership interest in the underlying assets and thus in the resulting cash flow.

The seller records a profit (or loss) on the sale of the underlying assets to investors through the pass-through security. A pass-through allows the transaction to go off the issuer’s balance sheet. Principal and interest collected on the assets are “passed through” to the security holders, the seller acts primarily as a servicer.

In the United States, the normal pass-through structure is that the assets are sold to a “grantor trust,” in which investors purchase equity interest in the assets of the trust and in subsequent cash flows. This is diagrammed in Figure 6.

A basic premise of the pass-through structure is that reconfiguration of cash flows is not permitted, as it would cause the trust to be deemed a taxable entity. Instead of being taxable directly, the trust’s taxable liabilities flow through to the holders of the pass-through certificates.

Legal title to the receivables is held by a trustee, but the trust must be passive and merely hold the trust property to protect and conserve it. The trustee should not have substantial managerial discretion over the trust assets or the power to improve the investors’ return by reinvesting the proceeds.

Pass-through payments should match the incoming payments on the assets. Imputed or actual interest and principal payments from payors may not be recharacterized, as would be the case, for example, with discount or premium prices paid for loan pools. The interest portion of a payment stream may be allocated among, for example, investors and the servicer or to support credit enhancement, but principal must be passed through to repay investors as received. Thus, in a pass-through security, the economics of the debt instrument issued is essentially the same as that of the underlying asset or asset pool.
Pay-Through Securities: Repayment of Interest and Principal

- For fee paid for collecting repayments
- Dividends
- Equity
- Investors
- Repayment collected from borrowers by seller
- Investors
- Interest as principal as indicated on notes
- Letter of Credit (if required)
- LOC Provider

Pay-Through Securities

A pay-through bond is a borrowing, not a participation. Under the pay-through structure, the assets are typically held by a limited purpose finance subsidiary that issues debt collateralized by the assets. Like a pass-through, the debt service is met by cash flow "paid through" to investors out of the pledged collateral. Investors in a pay-through bond are not direct owners of underlying assets; they have simply invested in a bond backed by some assets. Therefore, the issuing entity can manipulate the cash flows without tax consequences, hence the use of the pay-through structure for CMOs, which manipulate the incoming cash flows into separate payment streams. Thus, pay-through securities may be structured so that asset cash flows can be reconfigured to support forms of debt unlike those of the underlying assets.

In non-mortgage asset-backed deals, unlike the mortgage-backed market, the term "pay-through" can be used to refer to true sale transactions, in which a sale occurs between the asset seller and a special purpose trust or corporation. In some cases, the issuer is not a subsidiary of the original lender, but may instead be a subsidiary of an investment banking firm which buys the assets, or the 50/50 subsidiary of the seller of the assets and another investor. This special-purpose entity then issues a debt security collateralized by the asset cash flows. Where there is debt, there must be equity for tax purposes. Thus, in pay-through structures, equity can be supplied in the form of ownership of residual cash flow, a seller interest, or direct equity investment. Required levels of equity for a given pay-through structure are usually determined according to tax considerations. A simplified pay-through structure is diagrammed on the next page.

Variations on a pay-through structure are used for CMO-type auto and other vehicle loan securitization, for credit card and other revolving debt securitization, and for various forms of asset-backed commercial paper.

Asset-Backed Commercial Paper

- Trade receivables
- Trade receivables
- Trade receivables
- Corporations A
- Corporations B
- Corporations C
- Credit enhancement facility provider
- Sponsor/administration
- Payments on maturing ABCP
- Nominal dividends
- Legal owner
- INVESTORS

Infrastructure Securitization: Panjang Bridge

- Panjang toll bridges
- Construct and operate the toll bridge for a 20-year concession
- Proceeds of notes
- Renminbi
- Bank (to convert funds)
- Trustee (offshore)
- PBCo Ltd (issuer)
- ASIA Ltd
- PBDIC
- Operator
- Renminbi
- US dollars
- Proceeds of notes
- Toll revenues
- Renminbi
- Proceeds of notes
- Guarantee
- Bank (to convert funds)
- Trustee (offshore)
- ASIA Ltd
- US dollars
- Investors

Case Study: Ford Credit Owner Trust 1998-B

- What is the legal structure of this deal?
- What are the different classes of securities, and their terms?
- How is the SPV taxed?
- Is it a pass-through or a pay-through?
- Can you quantify the benefits or costs to the borrower?

Case Study: Sallie Mae Student Loan Trust 1998-2

- What are the different classes of securities, and their terms?
- What is the legal structure of this deal?
- Is it a pass-through or a pay-through?
- What are the benefits and risks to investors?
**Case Study: Trains I PLC**

- What are the underlying assets, and why do they need to be financed in this manner?
- What is the legal relationship between the parties to the deal?
- What are the benefits or risks to the borrower and investors?

**Case Study: Advanta Equipment Receivables**

- What are the underlying assets? Their cash-flow and risk characteristics?
- What are the different classes of securities, and their terms?
- What is the legal structure of this deal?
- What are the benefits or costs to the borrower and investors?

**Case Study: FILMS**

- What are the underlying assets, and why do they need to be financed in this manner?
- What is the legal relationship between the parties to the deal?
- What are the benefits or risks to the borrower and investors?

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