Synthetic ABS and Credit Default Swaps

Prof. Ian Giddy
Stern School of Business
New York University

Asset-Backed Securities: The Typical Structure

FORD (SPONSOR)
LOANS.

SALE OR ASSIGNMENT
Servicing Agreement

SPECIAL PURPOSE VEHICLE

ISSUES ASSET-BACKED CERTIFICATES
LOANS.

www.asiansecuritization.com
The Alternative: Synthetic ABS

DB (Originator)

REFERENCE POOL OF LOANS
(Stay on balance sheet)

CREDIT SWAP AGREEMENT

SPECIAL PURPOSE VEHICLE

TOP QUALITY INVESTMENTS

ISSUES ASSET-BACKED CERTIFICATES

---

Synthetic ABS or Collateralized Loan Notes

- CLNs are SPV debt backed by the credit of the selling bank (or better)
- No loans are sold to the SPV
- But performance is based on the performance of a reference pool of loans
  - If the reference credits perform, full debt service is made on the CLN
  - If the reference credits default, the CLN is deemed “defaulted” and payment is halted.
**Synthetic ABS**

**German Bank (Originator)**

- **Reference Pool of Loans**
  (Stay on Balance Sheet)

- **Credit Swap Agreement**

- **Special Purpose Vehicle**

- **Top Quality Investments**

- **Issues Asset-Backed Certificates**

**Protection against Pool Defaults**

- **EURIBOR plus “Premium”**

www.asiansecuritization.com
Credit Swaps in Synthetics: Doubts

- Problems with the collateral
  - Debates about “events of default”
  - Workouts and other pre-default losses
- Problems with the sponsor bank
  - Obtaining title to the collateral
  - Those “high quality investments”
- And all those swaps

Typical Credit Default Swap Arrangement

The guarantee:
- Pledge of a deposit in the sponsor bank
- Part or all of that deposit will be forfeited if there are pool losses
- “Losses in the transaction are defined as amounts written off in compliance with the bank’s usual procedures”
Case Study: Global High Yield Bond Trust

- What is the legal structure of this deal?
- What are the assets?
- What are the different classes of securities, and their terms?
- How do the synthetic CLOs work? (Draw a diagram)
- Should investors buy the subordinated tranche?
Types of Credit Derivatives

- Total Return Swaps
- Credit Default Swaps
- Credit Spread Options
- Credit Linked Notes

Total Return Swap

One view

TR Payer

Total Return of asset

LIBOR + Y bp p.a.

TR Receiver

And another

Bank

Total positive returns on a security

LIBOR + margin + costs on security

Investor

www.asiansecuritization.com
Credit Default Swaps

The key distinction between a Credit Swap and a TR Swap is that the former results in a contingent or floating payment only following a Credit Event, while the latter results in payments reflecting changes in the market valuation of a specified asset in the normal course of business.

Credit Spread Options

Put Writer

Payoff

0

Bond Spread

150BP

Bond Price

www.asiansecuritization.com
**Credit-Linked Notes**

- **BANK**
  - Reference pool of loans
  - Credit Default Swap
  - Credit Guarantee
  - Fee (like spread on bond)

- **SPV**
  - Deposits
  - Credit-linked notes (ABS)

---

**Purposes of Credit Derivatives**

- Diversification of risk away from institution's own portfolio
- More credit to one borrower than bank can hold directly
- Bank capital relief
- Leveraged investments in credit-sensitive assets (e.g., hedge funds)
Chase Secured Loan Trust Notes

- Chase Secured Loan Trust (CSLT) notes offer investors access to the high-yield bank loan market. One of the attractive aspects of this market to investors is that, while offering double-digit returns in many cases, the senior-secured status of bank loans has given them a very stable, and favorable, default percentage over the years. This is a market that has been widely untapped by institutional investors with only 20 - 25 percent of the $250 billion in syndicated leveraged loans outstanding held by this sector. The Chase structure uses credit derivatives to offer these investors access to this asset class.
- Take, for example, an investor who is prohibited from investing in anything lower than investment grade securities. In the Chase structure, the underlying credit derivative is a Total Return Swap between Chase and a trust. Chase pays the trust the total return on a loan portfolio of $100 million for example, which yields LIBOR plus 250 basis points. In exchange, Chase receives LIBOR plus 100 basis points from the trust. An investor who purchases a tranche of the CSLT in the form of a note receives the same return on the loan portfolio that is received by the trust from Chase on the TRS. For this return, the investor does not put up the total $100 million as would be required to participate in actual loan syndication. Rather, the investor pays $20 million for the tranche, which is used by the trust to purchase treasuries to post as collateral against the trust's payment on the TRS. When all the cash flows are broken down on the transaction, including the five times leverage of the $20 million for access to the $100 million loan portfolio plus the yield on the treasuries of 6 percent, the investor generates a total yield in this example of 13.5 percent.
- Draw a diagram to show how this is achieved

Valuation

- Evaluation of credit factors
- Discriminant analysis and credit-scoring models like Altman's z-score
- Option pricing models
Ian H. Giddy  
Stern School of Business  
New York University  
44 West 4th Street, New York, NY 10012, USA  
ian.giddy@nyu.edu  
http://giddy.org