Securitization 101: Introduction to Securitization

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Societe Generale
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Agenda Overview

► What is Securitization and What are the perceived benefits?
► Anatomy of a Securitization – How does it work?
► History and Evolution of the Product
► The Financial Crisis, Some Lessons, & Where do we go from here
What is Securitization?
What Is Securitization?

A financing technique whereby financial assets, with homogeneous performance characteristics and statistically predictable cash flows, are pooled and packaged into securities or other forms of investment, on a basis whereby the collectibility of such cash flows is isolated from the bankruptcy or insolvency risk of the seller.
What Is Securitization?

KEY FEATURES

► Debt Instrument *(space)* – Security, Note, Beneficial Interest
► Cash Flow Driven - Repayment relies on performance of financial assets, i.e. Receivables
► True Sale - Structures avoid seller’s bankruptcy risk, typically through the use of an SPV
What Assets are Securitized?
Some Asset Classes that Have Been Securitized

- Residential Mortgages
- Credit Cards
- Auto Loans
- Equipment Loans
- Student Loans
- Trade Receivables
- Dealer Loans

- Leases
- Commercial Loans
- Commercial Mortgages
- Home Equity Loans
- Boat/RV Loans
- Motorcycle Loans
- InsurancePremiums
<table>
<thead>
<tr>
<th>Studio Film Rights</th>
<th>Servicer Advances</th>
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<tr>
<td>Time Shares</td>
<td>Toll Roads</td>
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<td>Taxi Medallions</td>
<td>Storm Recovery Costs</td>
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<td>Delinquent Tax Liens</td>
<td>Whole Businesses (UK Pubs)</td>
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<td>Tax Refunds</td>
<td>Death Benefits</td>
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<td>Natural Gas</td>
<td>Intellectual Property</td>
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<tr>
<td>Production Rights</td>
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</tbody>
</table>
Why do Companies Securitize their Assets?
Potential Company Benefits

► Efficient Growth - Leverage

► Reduce Funding Costs (vs unsecured borrowing)

► Liquidity – Diversification of Funding

► Risk Transfer

► Accounting – Accelerate Earnings, Reduce Balance Sheet (when Accounting de-recognition is achieved)

► Regulatory Capital Relief (available to Bank sellers)
Potential Client Benefits

- Expands Access to Credit – for Consumers and Corporates
- Lowers cost of credit
- Increases the variety of credit available to meet Client needs
- Increases competition among Lenders
- Contributes to a healthy economy by keeping borrowing costs low, and delivering consumers and corporations with access to credit.
Who Buys Securitizations and Why?
ABS Investors

Traditional
- Insurance Companies
- Asset Managers
- Pension Funds
- Banks
- Corporations

Non-Traditional
- SIV’s
- CDO’s
- Hedge Funds
- Private Equity
Potential Benefits for Investors

► Access to High Quality Investments
  ► ABS bonds are frequently “AAA”-rated, at original issue, more than 79% of the ABS market volume

► Ratings Stability – Historically Relatively few downgrades

► Liquidity - Demonstrated yield spread stability, secondary markets

► Relatively high transparency and disclosure compared to Corporates

► Portfolio Diversification
Securitization Anatomy –
How Does It Work?
Tools of the Trade

- Special Purpose Entities
- Credit Enhancement
- Liquidity Support
- Maturity Matching
- Tranching
Audience Question:

What corporate rating would you give:

$100 million of notes secured by $200 million of US treasury securities
Answer:

It Depends.

You can’t determine based on the information provided.

The rating of Secured Notes depends on the Unsecured Rating of the Borrower.
Two Step (True) Sale

Originator/Servicer

Step 1: True Sale to SPE

Step 2: Don’t need a true sale

Underwriters, Investors or Securitization Trust

Notes

• True Sale de-links collectibility of the Assets from the bankruptcy of the Seller
• And thus de-couples the rating of a Securitization from that of the Seller
Special Purpose Entity

► Legal Transfer of Assets
► Non – Recourse to Seller
  ► Seller’s future obligations against asset performance is typically limited to Reps and Warranties on Asset Eligibility.

► SPE
  ► Discrete Legal Entity – Trust, LLC, Partnership
  ► Limited Purpose
  ► Separate Books and Records
  ► Independent Director
Audience Question:

What securitization rating would you give:

$100 million of notes backed by $200 million of auto loans
Answer:

- It depends.
- You can’t determine based on the information provided.
- The rating of ABS Notes depends on the credit quality of the auto loans.
Credit Enhancement

The primary risk in a typical securitization:

► Obligors don’t pay at all
► If they pay, it’s not on time, and/or
► They pay at times different from required payments on ABS

► Credit enhancement – covers nonpayment
► Liquidity – addresses payment at wrong time
Sizing of Credit Enhancement

- Depends on several factors:
  - Creditworthiness of the obligors
  - Obligor concentrations
  - Volatility of payment history
  - Economic factors, business trends
  - Additional Security (ex. Car, Home)
  - Many other factors
Designing the Securities

- Securities are structured to Match the Cash Flows of the Assets
  - Long term securities for long term assets (e.g., Mortgages, Autos). These are typically structured to amortize with collections (“Pass Through”)
  - Short term assets (e.g., Credit Cards, Trade Receivables) are typically structured as “Soft Bullet” maturities, with asset replenishment rights (i.e. collections are “reinvested” in new receivables) used to create desired Maturity
- Cash flow timing mismatches typically require hedging through swaps or liquidity facilities (reserves, additional O/C, etc.)
Tranching

Example:

Collections

- A Note 80%
- B Note 10%
- C Note 10%

Losses

- Sizing Determined by Asset Characteristics
  - Credit Quality
  - Payment Speed
- Collections applied through a “Waterfall”
Securitization Anatomy – Who Does What?
Basic ABS Parties/Structure

- Customers (Obligors)
- Originator (Seller)
- SPE (Issuer)
- Investors
- Servicer
- Trustee
- Underwriters (Banker)
- Accountants
- Lawyers
- Rating Agencies
- Regulators

Cash flow:
- Receivables $ → SPE (Issuer)
- Receivables $ → Investors
- Notes $ → SPE (Issuer)
- Notes $ → Investors

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Basic ABCP Parties/Structure

Service Providers

- Customers (Obligors)
- Originator 1 (Seller)
- SPE (Borrower)
- Administrative Agent (Sponsor)
- Owner (Managing Agent)
- Issuing & Paying Agent

Support Providers

- Customers (Obligors)
- Originator 2 (Seller)
- SPE (Borrower)
- Equity Investor (First Loss Note)
- Enhancement Provider (Letter of Credit)

- Customers (Obligors)
- Originator 3 (Seller)
- SPE (Borrower)
- Liquidity Providers

Conduit (ABCP Vehicle)

Placement Agents (CP Dealers)

Investors
Basic Issues to Every Deal

► Asset Type
► Accounting
► Regulatory
► Bankruptcy/UCC
► Rating Agencies
► Tax
► Securities Laws
► Investor Issues/ERISA
Securitization History – Evolution not Revolution
Brief History of Securitization

► 1970’s
  ► First MBS, Establishment of GSE’s - FNMA/GNMA/FHLMC
  ► Growth of investor market and development of tranching

► 1980’s
  ► Development of ABCP
  ► First ABS, Expansion of Asset Classes

► 1990’s
  ► Shelf Registration
  ► FAS 125/140
  ► Non-U.S. Markets / Cross Border
  ► CDO’s, CP Arbitrage Vehicles

► 2000’s
  ► Subprime Mortgages
  ► Leverage Products - SIV’s, Re-securitizations (CDO of ABS, CDO²)
  ► Synthetic Securitizations (Credit Derivatives)
  ► Nationalized Markets (CPFF, TALF, etc.)

► 2010’s……….?
Historical Securitization Issuance

Historical Securitization Issuance

ABS Issuance    ABCP    Agency MBS    Total Securitized Volume

1985 - 2008

1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008

$-    $500.0    $1,000.0    $1,500.0    $2,000.0    $2,500.0    $3,000.0    $3,500.0

1st ABS Issue: Sperry Lease Corp
1st Credit Card ABS Issue
1st Student Loan ABS Issue
Acceleration of Subprime lending and proliferation of non-traditional vehicles (SIV's, CDOs, Synthetics)

Mortgage lending reaches unsustainable levels
Low rate environment

Real Estate Bubble-Driven Refinancing

Sustainable trend

ABS and ABCP market volumes reach all-time highs in 2007
# Issuer League Tables

## Last Year

### 1/1/2008 - 12/31/2008

<table>
<thead>
<tr>
<th>Name (Issuer)</th>
<th>Amount</th>
<th>Rank</th>
<th>Mkt. Share</th>
<th>Number of Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLM Corp</td>
<td>18,523.3</td>
<td>1</td>
<td>11.3%</td>
<td>9</td>
</tr>
<tr>
<td>JPMorgan Chase &amp; Co</td>
<td>14,738.0</td>
<td>2</td>
<td>9.0%</td>
<td>16</td>
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<tr>
<td>Bank of America Corp</td>
<td>13,198.4</td>
<td>3</td>
<td>8.1%</td>
<td>17</td>
</tr>
<tr>
<td>American Express Co</td>
<td>11,700.0</td>
<td>4</td>
<td>7.1%</td>
<td>14</td>
</tr>
<tr>
<td>Citigroup Inc</td>
<td>10,484.8</td>
<td>5</td>
<td>6.4%</td>
<td>15</td>
</tr>
<tr>
<td>Ford Motor Co</td>
<td>8,940.3</td>
<td>6</td>
<td>5.5%</td>
<td>6</td>
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<tr>
<td>US Small Business Admin</td>
<td>5,520.5</td>
<td>7</td>
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<td>Capital One Financial Corp</td>
<td>4,922.9</td>
<td>8</td>
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<tr>
<td>NELNET Inc</td>
<td>4,468.3</td>
<td>9</td>
<td>2.7%</td>
<td>4</td>
</tr>
<tr>
<td>General Motors Corp</td>
<td>4,133.4</td>
<td>10</td>
<td>2.5%</td>
<td>4</td>
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</table>

**Industry Total**: 164,011.4 - 100.0% - 268

## 10 Years Ago

### 1/1/1998 - 12/31/1998

<table>
<thead>
<tr>
<th>Name (Issuer)</th>
<th>Amount</th>
<th>Rank</th>
<th>Mkt. Share</th>
<th>Number of Issues</th>
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</thead>
<tbody>
<tr>
<td>Republic of Venezuela</td>
<td>8,973.1</td>
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<tr>
<td>Bank One Corp, Chicago, IL</td>
<td>8,615.1</td>
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<tr>
<td>Conseco Inc</td>
<td>7,466.4</td>
<td>4</td>
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<tr>
<td>JPMorgan Chase &amp; Co</td>
<td>7,185.6</td>
<td>5</td>
<td>2.5%</td>
<td>12</td>
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<tr>
<td>ContiGroup Cos Inc</td>
<td>6,710.2</td>
<td>6</td>
<td>2.3%</td>
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<tr>
<td>USA Education Inc</td>
<td>6,057.7</td>
<td>7</td>
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<tr>
<td>Chrysler Financial Corp</td>
<td>5,749.8</td>
<td>8</td>
<td>2.0%</td>
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<tr>
<td>Ford Motor Co</td>
<td>5,685.5</td>
<td>9</td>
<td>2.0%</td>
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<tr>
<td>ADVANTA Corp</td>
<td>5,471.4</td>
<td>10</td>
<td>1.9%</td>
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</table>

**Industry Total**: 286,566.5 - 100.0% - 725

## 5 Years Ago

### 1/1/2003 - 12/31/2003

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<th>Amount</th>
<th>Rank</th>
<th>Mkt. Share</th>
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</thead>
<tbody>
<tr>
<td>General Motors Corp</td>
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<td>9.7%</td>
<td>90</td>
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<tr>
<td>JPMorgan Chase &amp; Co</td>
<td>30,154.3</td>
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<td>5.0%</td>
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<tr>
<td>Ameriquest Mortgage Corp</td>
<td>29,125.7</td>
<td>3</td>
<td>4.8%</td>
<td>56</td>
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<tr>
<td>SLM Corp</td>
<td>25,702.9</td>
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<tr>
<td>Lehman Brothers Holdings Inc</td>
<td>24,812.1</td>
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<td>4.1%</td>
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<tr>
<td>Morgan Stanley Group Inc</td>
<td>22,747.0</td>
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<td>3.8%</td>
<td>66</td>
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<td>Credit Suisse Group</td>
<td>22,337.1</td>
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<td>56</td>
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<td>Citigroup Inc</td>
<td>21,275.8</td>
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<td>43</td>
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<td>Countrywide Credit Industries</td>
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<td>11,678.5</td>
<td>10</td>
<td>1.9%</td>
<td>31</td>
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</table>

**Industry Total**: 605,299.6 - 100.0% - 1,256
### Underwriter League Tables

#### Last Year

<table>
<thead>
<tr>
<th>Name (Underwriter)</th>
<th>Amount</th>
<th>Rank</th>
<th>Mkt. Share</th>
<th>Number of Issues</th>
</tr>
</thead>
<tbody>
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<td>JP Morgan</td>
<td>30,898.5</td>
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<td>Banc of America Securities LLC</td>
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<td>Citi</td>
<td>20,085.4</td>
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<td>Barclays Capital</td>
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<td>Greenwich Capital Markets Inc</td>
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<td>Credit Suisse</td>
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<tr>
<td>Merrill Lynch</td>
<td>7,776.0</td>
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<tr>
<td>Morgan Stanley</td>
<td>7,686.1</td>
<td>9</td>
<td>4.7%</td>
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<tr>
<td>Lehman Brothers</td>
<td>5,889.3</td>
<td>10</td>
<td>3.6%</td>
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<td><strong>Industry Total</strong></td>
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<th>Number of Issues</th>
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<tr>
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<td>Salomon Smith Barney</td>
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<tr>
<td>Lehman Brothers</td>
<td>25,503.6</td>
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<td>8.9%</td>
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<tr>
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<td>19,109.0</td>
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<td>6.7%</td>
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<tr>
<td><strong>Industry Total</strong></td>
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<td><strong>100.0%</strong></td>
<td><strong>725</strong></td>
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#### 5 Years Ago

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</tr>
</thead>
<tbody>
<tr>
<td>JP Morgan</td>
<td>59,888.1</td>
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<td>9.9%</td>
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<tr>
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<td>8.3%</td>
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<td>7.9%</td>
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<td>Citigroup</td>
<td>45,508.7</td>
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<tr>
<td>Lehman Brothers</td>
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<tr>
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<td>39,945.1</td>
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<td>6.6%</td>
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<td>Credit Suisse First Boston</td>
<td>32,163.4</td>
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<td>29,501.9</td>
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<td>29,169.4</td>
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<td>4.8%</td>
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<td>Banc One Capital Markets, Inc.</td>
<td>24,171.9</td>
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<td>53</td>
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<td><strong>Industry Total</strong></td>
<td><strong>605,299.6</strong></td>
<td>-</td>
<td><strong>100.0%</strong></td>
<td><strong>1,256</strong></td>
</tr>
</tbody>
</table>
Securitization Today – Lessons for Tomorrow
What Went Wrong

► Artificially Low Interest Rates the Catalyst
► Securitization the Tool
► Greed, Overconfidence, Complacency the Fuels
► Musical Chairs Underwriting and Stupid? Leverage the Sparks
► ..........?
► Everyone connected is to blame at some level
Where Are We Today

Most **Egregious** Operators are Gone
Taxpayers Left Holding the Bag
Capital Markets Frail if not Broken
Origination to Distribution Model Shelved
Painful Ongoing Deleveraging

(Maybe the above points should be bulleted?)
Lessons for Tomorrow

► Securitization is just a Financing Technique
► Today, we are “back to the future” -
  ► Like the GSE programs of the 70’s, Government intervention and Government-supported programs are looked to deliver low risk low cost funding sources to borrowers.
► However, a nationalized banking system and nationalized markets are not a long term solution for Economic Recovery
► Capital Markets need to and will return
► And Securitization, on basic asset classes, conservatively underwritten, well-serviced, appropriately-leveraged, and properly monitored, will serve as a part of the solution.