

Asset-Backed Securities

**Asset Securitization:
Cost-Benefit Analysis**

Prof. Ian Giddy
Stern School of Business
New York University

Asset-Backed Securities

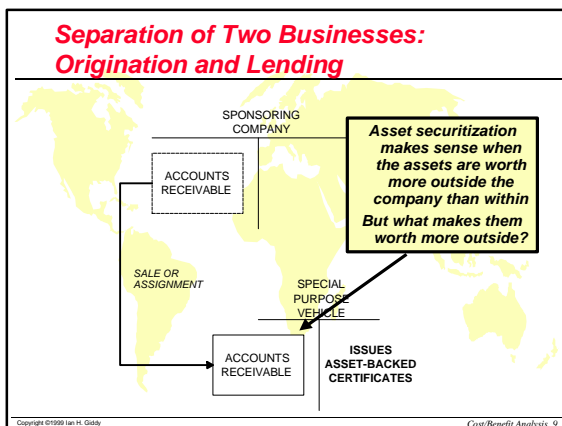
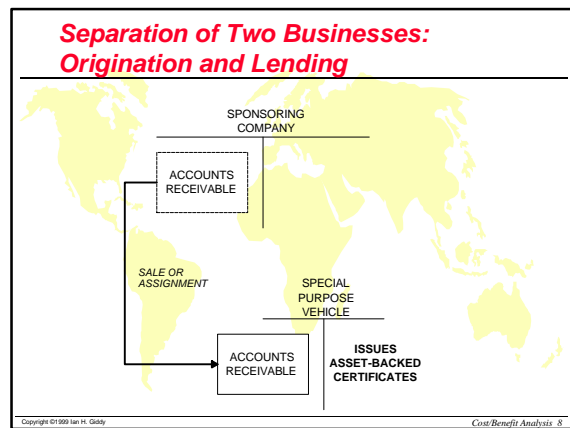
**When and Why to Use
Asset Securitization**

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Asset-Backed Securities

- The basic economics
- Issuer benefits & costs
- Investor benefits and risks
- The technique

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Potential Benefits to Corporations

- Removes assets from the balance sheet.
- Lower-cost financing.
- Retains competitive advantage.
- Nondisclosure.
- Recognition of gains (or losses).
- Improves asset/liability management
- *But: it is more complex, and there are up-front costs*

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Potential Benefits to Investors

- Investors can achieve
 - ◆ Superior return.
 - ◆ Liquidity.
 - ◆ Diversification.
 - ◆ Event risk reduction.
 - ◆ Overcome constraints
- But
 - ◆ ABS are more complex
 - ◆ Some risks remain, such as prepayment risk


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Potential Gains to the Economy

- Capital market development
- Source of funds for banks, finance companies and industrial companies
- Expanded source of financing for residential home ownership
- Potential for financing of infrastructure projects
- Cost savings to borrowers (eg 0.5% of the consumer finance market)

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The Chicken Theory



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The Economics of Asset Securitization

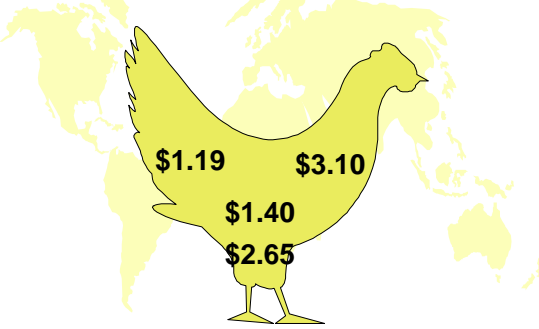
How should firms finance themselves? Two theories:

- A company's value comes from its real business: you can't increase its value by rearranging its liabilities. "You can't make money by cutting up the chicken and selling the parts."
- You *can* make money by cutting up a chicken:
 - ◆ Investors pay extra for securities tailored to their needs and constraints
 - ◆ Taxes (and subsidies)
 - ◆ Information asymmetries
 - ◆ Agency costs

But how does this apply to asset securitization?

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For Banks: Capital Requirements

- In a perfect world, adding good assets would require little additional capital, since creditors would not see any increase in the bank's risk
- But if regulatory capital requirements penalize banks for holding such assets, they should:
 - ◆ securitize the good assets
 - ◆ profit from origination and servicing
- *In general, regulatory costs or rigidities create an incentive for banks to shrink their balance sheets by securitizing loans*

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A Bank's Capital Savings

Securitization Cost-Benefit Analysis (for a regulated financial institution)		Gain/cost (\$ millions)
Funding cost savings	↳ Two-year bank notes vs pass-through rate	1.1
Upfront costs	↳ Underwriting ↳ SEC filing, legal fees, etc	(2.6)
Ongoing costs	↳ Letter-of-credit fee	(0.5)
Capital charge	↳ Cost of capital at 25% (15% after tax)	7.7
<i>Net benefit</i>		5.7

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For Corporations: "Pure Play" Argument

Separate the credit of the assets from the credit of the originator:

- Identify and isolate good assets from a company or financial institution
- Use those assets as backing for high-quality securities to appeal to investors.
- Such separation makes the quality of the asset-backed security independent of the creditworthiness of the originator.

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Why Did Chrysler Use ABS in 1992?

- Downgraded to B+ in early 1992
- Lost access to its normal funding sources
- Needed to continue to fund its car loans
- Only way to do this was to securitize the loans
- "Firms that securitize tend to have considerably weaker credit quality than other firms."

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The Keys to Successful Asset Securitization

- The economic elements that make this technique work are
 - ◆ to isolate the assets, thus making them more identifiable, secure and liquid,
 - ◆ to transfer risks to those best able to evaluate and bear them, and
 - ◆ to create tradeable securities
- Adds economic efficiency through cost savings to borrowers, creation of investment opportunities for investors, and development of the capital market.

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Prerequisites to Successful Asset Securitization

- Market imperfections are present
 - ◆ Investor information about the originators' operations is costly
 - ◆ Agency costs are high, or
 - ◆ Issuers are constrained by capital or other regulations, or where
 - ◆ Investors' choices are constrained
 - ◆ Government provides explicit or implicit backing for the issuer's debt.

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Prerequisites to Successful Asset Securitization (cont.)

- Monitoring is not impaired
 - ◆ incentive for the originator to keep defaults to a minimum
 - ◆ monitoring role for rating agencies, guarantors and trustees.
- Legal and tax framework
 - ◆ facilitates asset sale and separation
 - ◆ protects both issuers and investors

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Originator Suitability Criteria

- Does the originator currently face a **high cost of funding** assets that would be recognized as sound, cash-generating assets if taken in isolation?
- Does it have a regulatory or **capital constraint** that makes freeing up the balance sheet important?
- Does it have **data** about the assets (required by rating agencies and financial guarantors)?
- Does it have the **servicing** process and systems that can meet the more demanding standards of the asset-backed market?
- Is the originator **willing** to undertake a complex, time-consuming transaction to obtain a broader, potentially cheaper, ongoing source of funding?

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Costs Associated with Securitization

- Interest cost of the debt
- Issuance expenses of the debt
- Also:
 - ◆ Credit enhancement and liquidity support for the assets
 - ◆ Structuring fees payable to bankers
 - ◆ Legal, accounting and tax advice fees
 - ◆ Rating agencies' fees
 - ◆ Systems modifications
 - ◆ Management time

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Costs Needed to Measure the Annual Pre-Tax Impact of Securitization

- The interest on the securitized funding
- The annual costs of credit enhancement/liquidity lines
- Any guarantees to enhance the credit rating of any interest rate or foreign exchange swap counterparty
- Amortized front-end fees (debt issuance, credit enhancement, liquidity lines)
- Amortized transaction costs (legal, accounting, structuring, rating, etc.)
- Opportunity costs relating to any temporary cash retention in any guaranteed investment contract (GIC)
- Annual systems/accounting/rating agency costs etc.

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Sample Cost/Benefit Analysis

	Amount, % per annum (example)
Gains or savings from securitization	
Savings on borrowing rate paid	2
Savings on capital cost	5
Servicing fees	1
Residual amounts returned upon retirement of ABS	3
<i>Total gains</i>	11
Additional costs from securitization	
Foregone revenue from the assets	4
Higher required return on debt	2
Higher required return on equity	1
Annual cost of guarantees and credit lines	0.5
Amortized front-end fees (underwriting, liquidity lines, guarantee)	0.5
Amortized front-end costs (legal, accounting, rating agencies, etc)	0.5
Opportunity cost of funds in reserve accounts	0.25
Additional systems costs	0.25
Annual costs, including systems and administration, trustee fees, etc	0.5
<i>Total costs</i>	9
<i>Net savings from asset securitization</i>	2

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The Decision Process

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    graph TD
      Start[Corporation or Financial Institution requires additional funds to give customers financing or to finance a future revenue stream.] --> Q1{Are funds freely available from banks?}
      Q1 -- Yes --> A1[Borrow from banks]
      Q1 -- No --> Q2{Does the firm/FI have good, self-liquidating assets?}
      Q2 -- No --> A2[Issue equity or mezzanine capital]
      Q2 -- Yes --> Q3{Do the assets have a sufficiently high yield to cover servicing and other costs?}
      Q3 -- No --> A3[Get out of the financing business]
      Q3 -- Yes --> Q4{Would the assets be worth more (have a cheaper all-in funding cost) if they were isolated from the company/FI?}
      Q4 -- No --> A4[Use assets as collateral for on-balance sheet debt]
      Q4 -- Yes --> End[Securitize the assets]
    
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Costs and Benefits of Asset-Backed Securities: Summary

- Asset-backed securities can create value for investors and issuers if:
 - ◆ The assets are for some reason worth more off the balance sheet than on
 - ◆ The right legal framework is in place
 - ◆ The costs do not exceed the benefits
- Sometimes they do not work because you cannot make money by cutting up a dog

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Sears Credit Account Master Trust

- What are the economic benefits and costs to Sears in this ABS deal?
- What do the underlying assets earn?
- What rates do the securities pay?
- Other costs?
- Who gets the excess spread?

Group work

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Sears Credit Account Master Trust

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**See Excel Spreadsheet
abs_cost-benefit.xls**

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