Asset-Backed Securities

Asset-Backed Securities
and
Corporate Financing Choices

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Corporate Financing Choices and ABS

- What is the best mix of financing sources for particular companies?
- The optimal financing mix depends on the business
- How does asset securitization fit in?
- Certain kinds of companies or financial institutions find that they have financial assets, such as accounts receivable or loans, that investors value more when they are separated from the company or bank.

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First Principles

- Invest in projects that yield a return greater than the minimum acceptable hurdle rate.
  - The hurdle rate should be higher for riskier projects and reflect the financing mix used - owners' funds (equity) or borrowed money (debt)
  - Returns on projects should be measured based on cash flows generated and the timing of these cash flows; they should also consider both positive and negative side effects of these projects.
- Choose a financing mix that minimizes the hurdle rate and matches the assets being financed.
- If there are not enough investments that earn the hurdle rate, return the cash to stockholders.
  - The form of returns - dividends and stock buybacks - will depend upon the stockholders' characteristics
- Minimize unnecessary financial risks.

Objective: Maximize the Value of the Firm
Corporate Financing Choices

- Do financing choices matter?
- Debt or equity?
- What kind of debt?

Certain kinds of *market imperfections* allow corporations to reduce costs by improving the financing mix.

Is There an Optimal Capital Structure?

Assets' value is the present value of the cash flows from the real business of the firm.

\[
\text{Value of the firm} = \text{PV(Cash Flows)} = D + E
\]
Does Capital Structure Matter?

Assets' value is the present value of the cash flows from the real business of the firm

Value of the firm = PV(Cash Flows)

Value of the firm = D + E

You cannot change the value of the real business just by shuffling paper - Modigliani-Miller

The "Conservation of Risk" argument

You cannot change the risk of the business just by shuffling paper - Modigliani-Miller
The Financing Side: Is There an Optimal Capital Structure?

Assets’ value is the present value of the cash flows from the real business of the firm.

Value of the firm = PV(Cash Flows)

Debt
Equity

Value of the firm = D + E

Optimal debt ratio?

When Debt and Equity are Not Enough

Assets

Liabilities

Value of future cash flows

Claims on the cash flows
When Debt and Equity are Not Enough

Assets

<table>
<thead>
<tr>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt:</td>
</tr>
<tr>
<td>Value of future cash flows</td>
</tr>
<tr>
<td>Contractual int. &amp; principal</td>
</tr>
<tr>
<td>No upside</td>
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<tr>
<td>Senior claims</td>
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<tr>
<td>Control via restrictions</td>
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<tr>
<td>Equity:</td>
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<tr>
<td>Residual payments</td>
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<td>Upside and downside</td>
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<tr>
<td>Residual claims</td>
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<tr>
<td>Voting control rights</td>
</tr>
</tbody>
</table>

What if...

Claims are inadequate?

Returns are inadequate?
When Debt and Equity are Not Enough

**Assets**

- Value of future cash flows

**Liabilities**

- Debt
  - Contractual int. & principal
  - No upside
  - Senior claims
  - Control via restrictions
- Equity
  - Residual payments
  - Upside and downside
  - Residual claims
  - Voting control rights

**Alternatives**

- Collateralized
- Asset-securitized
- Project financing
- Preferred
- Warrants
- Convertible

**FINANCING ALTERNATIVES AVAILABLE TO MAJOR CORPORATIONS**

- Debt
  - Subsidized funds
  - Private placement
  - Public offering
  - Revolving facility
  - Term loan
  - Revolving facility
  - Real estate
  - Leasing
  - Asset-backed
  - Unsecured
  - Domestic
  - Eurobond
  - MTN
  - FRN
  - VRN

- Equity
  - Domestic
  - Equity options
  - Stripped
  - Unstripped
  - Private sale
  - Full-refund
  - Restricted
  - Public offering
  - International

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**What Kind of Debt? Some Considerations**

- **Fixed/floating:**
  - How certain are the cash flows? Are operating profits linked to interest rates or inflation?

- **Maturity or availability:**
  - Are the assets short term or long term? Should the firm assume ease of refinancing, or buy an option on access to financing?

- **Currency:**
  - Consider currency of the assets: currency of location vs. currency of denomination vs. currency of determination.

**Application**

- How should Spanish oil company Repsol finance its $13.4 billion acquisition of Argentina’s YPF? (Fixed/floating; Maturity or availability; Currency?)

- Originally planned to finance it entirely with long-term US debt. But the falling Euro with a lower interest rate led the company to finance 30%-40% in Euros.

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Main Guidelines for Financing:

- Liabilities to match assets: economic exposure of the firm determines base financing choices.
- Decision on whether or not to fully match depends on company's view relative to the view implied by market prices.
- When strategy is chosen, use the financing/hedging techniques that offer the lowest effective cost.

Why use asset-backed securities?
**Financing Choices and Asset-Backed Securities**

- ABS are complex and expensive to structure. Hence in a perfect market with no informational inefficiencies, no need for ABS.
- Use of ABS may make sense when there are:
  - Subsidies, guarantees or regulatory incentives
  - Information-based value added

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**The Chicken Theory**

$7.99
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?

Beyond Modigliani-Miller’s “Conservation of Risk” Argument

- Securitization creates assets with less risk and greater liquidity, hence a lower cost of financing
- But can the higher quality be achieved without a commensurate decrease in the quality of the remainder of the company?
- Yes -- if securitization sweetens a lemon!
- Reason: when a company faces uncertainties, investors demand a premium. But investor concerns about receivables can be dispelled at far lower cost than other concerns about the company and its overall performance.
**Information-Based Value Added**

- Information about a company’s receivables is improved
- Specialization in risk-bearing is achieved
- ABS has positive “signalling effect,” especially when residual rights retained by company

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**The Chicken Again**

$1.19  $1.40  $2.65  $3.10

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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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