Corporate Finance
Syllabus and Outline
http://www.stern.nyu.edu/~adamodar

Aswath Damodaran
General Information

- Office: Room 9-94
- Phone: 998-0340
- E-mail: adamodar@stern.nyu.edu
- Home Page: http://www.stern.nyu.edu/~adamodar
What is corporate finance?

- Every decision that a business makes has financial implications, and any decision which affects the finances of a business is a corporate finance decision.
- Defined broadly, everything that a business does fits under the rubric of corporate finance.
Course Objectives

- To give you the capacity to understand the theory and apply, in real world situations, the techniques that have been developed in corporate finance.
  
  *If it cannot be applied, who cares?*

- To give you the big picture of corporate finance so that you can understand how things fit together.
  
  *You can forget the details, but don’t miss the story.*

- To show you that corporate finance is fun.
  
  *It takes more work, but it is more fun*
## The Traditional Accounting Balance Sheet

### The Balance Sheet

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Lived Real Assets</td>
<td>Current Liabilities</td>
</tr>
<tr>
<td>Short-lived Assets</td>
<td>Short-term liabilities of the firm</td>
</tr>
<tr>
<td>Investments in securities &amp; assets of other firms</td>
<td>Debt</td>
</tr>
<tr>
<td>Assets which are not physical, like patents &amp; trademarks</td>
<td>Other Liabilities</td>
</tr>
<tr>
<td></td>
<td>Other long-term obligation</td>
</tr>
<tr>
<td></td>
<td>Equity</td>
</tr>
<tr>
<td></td>
<td>Equity investment in firm</td>
</tr>
<tr>
<td>Fixed Assets</td>
<td></td>
</tr>
<tr>
<td>Current Assets</td>
<td></td>
</tr>
<tr>
<td>Financial Investments</td>
<td></td>
</tr>
<tr>
<td>Intangible Assets</td>
<td></td>
</tr>
</tbody>
</table>
The Financial View of the Firm

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Investments</strong></td>
<td><strong>Fixed Claim on cash flows</strong></td>
</tr>
<tr>
<td>Generate cashflows today</td>
<td>Little or No role in management</td>
</tr>
<tr>
<td>Includes long lived (fixed) and short-lived</td>
<td><strong>Fixed Maturity</strong></td>
</tr>
<tr>
<td>working capital) assets</td>
<td><strong>Tax Deductible</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assets in Place</strong></td>
<td><strong>Debt</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Fixed Claim on cash flows</strong></td>
</tr>
<tr>
<td></td>
<td>Little or No role in management</td>
</tr>
<tr>
<td></td>
<td><strong>Fixed Maturity</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Tax Deductible</strong></td>
</tr>
<tr>
<td><strong>Growth Assets</strong></td>
<td><strong>Equity</strong></td>
</tr>
<tr>
<td><strong>Expected Value that will be created by</strong></td>
<td><strong>Residual Claim on cash flows</strong></td>
</tr>
<tr>
<td>future investments**</td>
<td>Significant Role in management</td>
</tr>
<tr>
<td></td>
<td><strong>Perpetual Lives</strong></td>
</tr>
</tbody>
</table>

Existing Investments
Generate cashflows today
Includes long lived (fixed) and short-lived (working capital) assets

Expected Value that will be created by future investments
The Investment Decision
Invest in projects that yield a return greater than the minimum acceptable hurdle rate.

Hurdle Rate
Should be higher for riskier projects and reflect the financing mix used - debt or equity.

Returns
Should be time-weighted, cash flow based, incremental returns, reflecting all side costs and benefits.

Financing Mix
Includes Debt and Equity, and can affect both the hurdle rate and the cash flows.

Financing Type
Should be as close as possible to the asset being financed.

The Financing Decision
Choose a financing mix that maximizes the value of the projects taken, and matches the assets being financed.

Maximize the Value of the Firm

The Dividend Decision
If there are not enough investments that earn the hurdle rate, return the cash to the owners.

How much?
Excess cash after meeting all business needs.

What form?
Whether the cash should be returned as dividends or stock buybacks or spin-offs will depend upon the stockholder preferences.

Aswath Damodaran
Outlines for Class

- Understand the objective function: Session 1
- The Investment Principle
  - Risk and Hurdle Rates: Session 1-2
  - Measuring Returns: Session 2,3
- The Financing Principle
  - The Optimal Financing Mix: Session 4-5
  - The Right Kind of Debt
- The Dividend Principle
  - How much to return to owners: Session 6
  - How to return
- Linking financial decisions to value: Session 7
Required Material

- I. Text: Lecture Notes
- II. Supplementary Text:
  - Applied Corporate Finance by Aswath Damodaran
- III. Practice Problems/Exams:
  - Every quiz I have ever given in any corporate finance class is available on my website, with solutions.
  - There are also problems in the supplementary book, and solutions.
- IV. Computer Spreadsheet Programs: accessible on my home page www.stern.nyu.edu/~adamodar
- V. Real World Readings
  - Fortune, Forbes, BusinessWeek and Barrons
<table>
<thead>
<tr>
<th>Session</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chapter 1, 2, 3</td>
</tr>
<tr>
<td>2-3</td>
<td>Chapter 4, 5</td>
</tr>
<tr>
<td>4-5</td>
<td>Chapter 7-9</td>
</tr>
<tr>
<td>6</td>
<td>Chapter 10,11</td>
</tr>
<tr>
<td>7</td>
<td>Chapter 12</td>
</tr>
</tbody>
</table>
Other Readings

  - This book has a number of readings on topics in corporate finance, which are both readable and informative.

- Capital Ideas by Peter Bernstein
  - This book looks back at the development of many of the most important ideas in corporate finance.

- A Random Walk down Wall Street by Burt Malkiel
  - This is not a corporate finance book, but it provides a 'skeptic's' view of Wall Street and its ways.

- Sense and Nonsense in Corporate Finance by Louis Lowenstein
  - This book contests much that is taken as accepted wisdom in corporate finance. I agree with very little in this book, but it is worth reading for a contrary viewpoint.
Grading Basis

■ **Project**: This is a project that will require you to apply everything you learn in class to a real company of your choice. It is worth 50%. The project is due two weeks after the final class (on March 23)

■ **Individual Work**:
  - Quizzes: There will be two quizzes - 45 minutes each
  - Quiz 1: February 16: Covers material from sessions 1 and 2
  - Quiz 2: March 9: Covers material from session 3, 4 and 5

Each quiz will be worth 25%
Rules of Engagement

- Rules on individual work
  - All quizzes are strictly individual work. They are open-book and open-notes
  - There will be no make-up quizzes. If you miss a quiz due to ill health, the grade will be redistributed over the remaining part of the course.
  - I will be the grader, and I do make mistakes. If I screw up, bring it to my attention and I will fix it.

- Rules on Participation
  - All participation is welcome.