THE RIGHT FINANCING

The perfect financing for you. Yes, It exists!
Set Up and Objective
1: What is Corporate Finance
2: The Objective: Utopia and Let Down
3: The Objective: Reality and Reaction

The Investment Decision
Invest in assets that earn a return greater than the minimum acceptable hurdle rate

Hurdle Rate
4. Define & Measure Risk
5. The Risk free Rate
6. Equity Risk Premiums
7. Country Risk Premiums
8. Regression Betas
9. Beta Fundamentals
10. Bottom-up Betas
11. The "Right" Beta
12. Debt: Measure & Cost
13. Financing Weights

Investment Return
14. Earnings and Cash flows
15. Time Weighting Cash flows
16. Loose Ends

The Financing Decision
Find the right kind of debt for your firm and the right mix of debt and equity to fund your operations

Financing Mix
17. The Trade off
18. Cost of Capital Approach
19. Cost of Capital: Follow up
20. Cost of Capital: Wrap up
21. Alternative Approaches
22. Moving to the optimal

Financing Type
23. The Right Financing

The Dividend Decision
If you cannot find investments that make your minimum acceptable rate, return the cash to owners of your business

Dividend Policy
24. Trends & Measures
25. The trade off
26. Assessment
27. Action & Follow up
28. The End Game

Valuation
29. First steps
30. Cash flows
31. Growth
32. Terminal Value
33. To value per share
34. The value of control
35. Relative Valuation

36. Closing Thoughts
Designing Debt: The Fundamental Principle

- The objective in designing debt is to make the cash flows on debt match up as closely as possible with the cash flows that the firm makes on its assets.
- By doing so, we reduce our risk of default, increase debt capacity and increase firm value.
Design the perfect financing instrument

- The perfect financing instrument will
  - Have all of the tax advantages of debt
  - While preserving the flexibility offered by equity

Start with the Cash Flows on Assets/Projects

Define Debt Characteristics

- Duration
- Currency
- Effect of Inflation Uncertainty about Future
- Growth Patterns
- Cyclicality & Other Effects

- Duration/ Maturity
- Currency Mix
- Fixed vs. Floating Rate
  - More floating rate
    - if CF move with inflation
    - with greater uncertainty on future
- Straight versus Convertible
  - Convertible if cash flows low now but high exp. growth
- Special Features on Debt
  - Options to make cash flows on debt match cash flows on assets

Commodity Bonds
Catastrophe Notes

Design debt to have cash flows that match up to cash flows on the assets financed.
Ensuring that you have not crossed the line drawn by the tax code

- All of this design work is lost, however, if the security that you have designed does not deliver the tax benefits.
- In addition, there may be a trade off between mismatching debt and getting greater tax benefits.
While keeping equity research analysts, ratings agencies and regulators applauding

- Ratings agencies want companies to issue equity, since it makes them safer.
- Equity research analysts want them not to issue equity because it dilutes earnings per share.
- Regulatory authorities want to ensure that you meet their requirements in terms of capital ratios (usually book value). Financing that leaves all three groups happy is nirvana.

Consider ratings agency & analyst concerns

<table>
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<tr>
<th>Analyst Concerns</th>
<th>Ratings Agency</th>
<th>Regulatory Concerns</th>
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<tr>
<td>- Effect on EPS</td>
<td>- Effect on Ratios</td>
<td>- Measures used</td>
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<tr>
<td>- Value relative to comparables</td>
<td>- Ratios relative to comparables</td>
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Can securities be designed that can make these different entities happy?

Operating Leases
MIPs
Surplus Notes
Debt or Equity: The Strange Case of Trust Preferred

- Trust preferred stock has
  - A fixed dividend payment, specified at the time of the issue
  - That is tax deductible
  - And failing to make the payment can give preferred stockholders voting rights.

- When trust preferred was first created, ratings agencies treated it as equity. As they have become more savvy, ratings agencies have started giving firms only partial equity credit for trust preferred.

- Assuming that trust preferred stock gets treated as equity by ratings agencies, which of the following firms is the most appropriate firm to be issuing it?
  a. A firm that is under levered, but has a rating constraint that would be violated if it moved to its optimal
  b. A firm that is over levered that is unable to issue debt because of the rating agency concerns.
Soothe bondholder fears

- There are some firms that face skepticism from bondholders when they go out to raise debt, because
  - Of their past history of defaults or other actions
  - They are small firms without any borrowing history
- Bondholders tend to demand much higher interest rates from these firms to reflect these concerns.

<table>
<thead>
<tr>
<th>Factor in agency conflicts between stock and bondholders</th>
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<tr>
<td>- Observability of Cash Flows by Lenders</td>
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<td>- Less observable cash flows lead to more conflicts</td>
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<td>- Type of Assets financed</td>
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<td>- Tangible and liquid assets create less agency problems</td>
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<td>- Existing Debt covenants</td>
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<td>- Restrictions on Financing</td>
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If agency problems are substantial, consider issuing convertible bond.

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<th>Convertibles</th>
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<td>Puttable Bonds</td>
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<td>Rating Sensitive Notes</td>
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<td>LYONs</td>
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And do not lock in market mistakes that work against you

- Ratings agencies can sometimes under rate a firm, and markets can underprice a firm’s stock or bonds. If this occurs, firms should not lock in these mistakes by issuing securities for the long term. In particular,
  - Issuing equity or equity based products (including convertibles), when equity is under priced transfers wealth from existing stockholders to the new stockholders
  - Issuing long term debt when a firm is under rated locks in rates at levels that are far too high, given the firm’s default risk.

- What is the solution
  - if you need to use equity?
  - if you need to use debt?
# Designing Disney’s Debt

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<tr>
<th>Business</th>
<th>Project Cash Flow Characteristics</th>
<th>Type of Financing</th>
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| Studio entertainment | Movie projects are likely to  
• Be short-term  
• Have cash outflows primarily in dollars (because Disney makes most of its movies in the U.S.), but cash inflows could have a substantial foreign currency component (because of overseas revenues)  
• Have net cash flows that are heavily driven by whether the movie is a hit, which is often difficult to predict | Debt should be  
1. Short-term  
2. Primarily dollar debt. Mixed currency debt, reflecting audience make-up.  
3. If possible, tied to the success of movies. |
| Media networks    | Projects are likely to be  
1. Short-term  
2. Primarily in dollars, though foreign component is growing, especially for ESPN.  
3. Driven by advertising revenues and show success (Nielsen ratings) | Debt should be  
1. Short-term  
2. Primarily dollar debt  
3. If possible, linked to network ratings |
| Park resorts      | Projects are likely to be  
1. Very long-term  
2. Currency will be a function of the region (rather than country) where park is located.  
3. Affected by success of studio entertainment and media networks divisions | Debt should be  
1. Long-term  
2. Mix of currencies, based on tourist makeup at the park. |
| Consumer products | Projects are likely to be short- to medium-term and linked to the success of the movie division; most of Disney’s product offerings and licensing revenues are derived from their movie productions | Debt should be  
1. Medium-term  
2. Dollar debt |
| Interactive       | Projects are likely to be short-term, with high growth potential and significant risk. While cash flows will initially be primarily in US dollars, the mix of currencies will shift as the business ages. | Debt should be short-term, convertible US dollar debt. |
Recommendations for Disney

- The debt issued should be long term and should have duration of about 4 to 5 years.
- A significant portion of the debt should be floating rate debt, reflecting Disney’s capacity to pass inflation through to its customers and the fact that operating income tends to increase as interest rates go up.
- Given Disney’s sensitivity to a stronger dollar, a portion of the debt should be in foreign currencies. The specific currency used and the magnitude of the foreign currency debt should reflect where Disney makes its revenues. Based upon 2013 numbers at least, this would indicate that about 18% of its debt should be foreign currency debt. As its broadcasting businesses expand into Latin America, it may want to consider using either Mexican Peso or Brazilian Real debt as well.
Analyzing Disney’s Current Debt

- Disney has $14.3 billion in interest-bearing debt with a face-value weighted average maturity of 7.92 years. Allowing for the fact that the maturity of debt is higher than the duration, this would indicate that Disney’s debt may be a little longer than would be optimal, but not by much.

- Of the debt, about 5.49% of the debt is in non-US dollar currencies (Indian rupees and Hong Kong dollars), but the rest is in US dollars and the company has no Euro debt. Based on our analysis, we would suggest that Disney increase its proportion of Euro debt to about 12% and tie the choice of currency on future debt issues to its expansion plans.

- Disney has no convertible debt and about 5.67% of its debt is floating rate debt, which looks low, given the company’s pricing power. While the mix of debt in 2013 may be reflective of a desire to lock in low long-term interest rates on debt, as rates rise, the company should consider expanding its use of foreign currency debt.
Adjusting Debt at Disney

- It can swap some of its existing fixed rate, dollar debt for floating rate, foreign currency debt. Given Disney’s standing in financial markets and its large market capitalization, this should not be difficult to do.

- If Disney is planning new debt issues, either to get to a higher debt ratio or to fund new investments, it can use primarily floating rate, foreign currency debt to fund these new investments. Although it may be mismatching the funding on these investments, its debt matching will become better at the company level.
Debt Design for Bookscape & Vale

- **Bookscape**: Given Bookscape’s dependence on revenues at its New York bookstore, we would design the debt to be
  
  **Recommendation**: Long-term, dollar-denominated, fixed rate debt
  
  **Actual**: Long term operating lease on the store

- **Vale**: Vale’s mines are spread around the world, and it generates a large portion of its revenues in China (37%). Its mines typically have very long lives and require large up-front investments, and the costs are usually in the local currencies but its revenues are in US dollars.

  - **Recommendation**: Long term, dollar-denominated debt (with hedging of local currency risk exposure) and if possible, tied to commodity prices.
  
  - **Actual**: The existing debt at Vale is primarily US dollar debt (65.48%), with an average maturity of 14.70 years. All of the debt, as far as we can assess, is fixed rate and there is no commodity-linked debt.
And for Tata Motors and Baidu

- **Tata Motors**: As an manufacturing firm, with big chunks of its revenues coming from India and China (about 24% apiece) and the rest spread across developed markets.
  - **Recommendation**: Medium to long term, fixed rate debt in a mix of currencies reflecting operations.
  - **Actual**: The existing debt at Tata Motors is a mix of Indian rupee debt (about 71%) and Euro debt (about 29%), with an average maturity of 5.33 years and it is almost entirely fixed rate debt.

- **Baidu**: Baidu has relatively little debt at the moment, reflecting its status as a young, technology company.
  - **Recommendation**: Convertible, Chinese Yuan debt.
  - **Actual**: About 82% of Baidu’s debt is in US dollars and Euros currently, with an average maturity of 5.80 years. A small portion is floating rate debt, but very little of the debt is convertible.
Application Test: Choosing your Financing Type

Based upon the business that your firm is in, and the typical investments that it makes, what kind of financing would you expect your firm to use in terms of

a. Duration (long term or short term)

b. Currency

c. Fixed or Floating rate

d. Straight or Convertible
Task
Determine the right type of financing for your firm, given its characteristics