(1) Financing Overview, cont.

(2) Cash Flow Analysis
   (Financial Strategy)

(3) Midterm
(1) Financing

Capital Structure of a company refers to how it is financed.

Companies are financed from two sources:

- **The company's owners (shareholders)**
- **Financial institutions (e.g., banks) or individuals that lend money to the company (debt holders)**

↓

cash contributed by shareholders is called equity capital

cash contributed by debt holders is called debt capital.

The capital structure of the company is the debt-to-equity ratio:

\[
\frac{\text{debt capital}}{\text{equity capital}}
\]
A high debt/equity ratio ⇒

more earning potential, but
more risk
-called “being leveraged”

Typical D/E ratios... it depends
on the market

e.g. hardware company vs software company

why?: inventory & machinery can be sold to cover debt
A 1-year business cycle

Turning capital investment into profits (in $1,000's)

Step 1: Raise capital
- Equity: 500
- Debt: 500
- Total: 1,000

Step 2: Create assets
- Product Development
- Product Manufacturing
- Equipment
- Facilities
- Total: 1,000

Step 3: Make Sales
- Sales of Product
- Licensed Technology
- Consulting
- Total Revenue: 500

Step 4: Determine Profits
- Revenue - Costs
- Costs: 400
- Total Profits: 100

Retained earnings (50)

Loan interest $25

Dividends to shareholders (50)
Financial Metrics for Assessing a Company

1) Capital Structure: \( \frac{\text{debt}}{\text{equity}} \)

\[ \text{Ex: } \frac{800k}{500k} = 1 \]

2) Return on Assets (ROA): \( \frac{\text{Revenue}}{\text{Assets}} \)

\[ \text{Ex: } \frac{500k}{1,000k} = 0.5 \text{ or } 50\% \]

3) Profit Margin: \( \frac{\text{Profit}}{\text{Revenues}} \)

\[ \text{Ex: } \frac{100k}{500k} = 20\% \text{ (very good)} \]

4) Retention Rate: \( \frac{\text{Retained Earnings}}{\text{Profit}} \)

\[ \text{e.g.: } \frac{50k}{100k} = 50\% \]
(5) Return on invested capital  
\[ \text{ROIC} = \frac{\text{Profit}}{\text{invested capital}} \]

\[ \text{E.g.:} \quad \frac{\$100}{\$1,000} = 10\% \quad \text{(good)} \]

(6) Return on Equity (ROE)  
\[ \text{ROE} = \frac{\text{Profit}}{\text{equity capital}} \]

\[ \text{Ex:} \quad \frac{\$100}{\$500} = 20\% \]

(7) Return on Debt  
\[ \text{Profit} \quad \text{debt capital} \]

\[ \text{E.g.:} \quad \frac{\$100K}{\$500K} = 20\% \]

(8) Equity cost:  
\[ (\%) = \frac{\text{dividends}}{\text{equity capital}} \]

\[ \text{E.g.:} \quad \frac{\$50K}{\$500K} = 10\% \]

(9) Debt cost:  
\[ (\%) = \frac{\text{interest payments}}{\text{debt capital}} \]

\[ \text{E.g.:} \quad \frac{\$25K}{\$500K} = 5\% \]
(10) Weighted average cost of capital

\[ WACC = \left( \frac{\text{equity capital}}{\text{invested capital}} \right) \times \text{equity cost(\%)} \]

\[ + \left( \frac{\text{debt capital}}{\text{invested capital}} \right) \times \text{debt cost(\%)} \]

\[ = \left( \frac{\$500k}{\$1,000k} \right) \times 10\% \]

\[ + \left( \frac{\$500k}{\$1,000k} \right) \times 5\% \]

\[ = 7.5\% \]