Carolinas Cash Adventure - 2018: CTP Track

Capital Structure Decision & Management

Session #5 (Mon. 10:30 – 11:30 am)

The Treasury Academy

New Frontiers in Treasury Education

- ***ETM5-Chapter 20:*** *Capital Structure Decision and Management*

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As a prep course for the CTP exam, significant portions of these lectures are based on materials from the ***Essentials*** text.

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Overview of Chapter 20 Topics

- Introduction
- Capital Structure of A Company
- Raising and Managing Long-Term Capital
- Cost of Capital and Firm Value
- Lease Financing and Management
- Equity Financing and Management
- Other Topics in Financial Decisions

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Capital Structure of A Company

- Optimal and Target Capital Structures
- Trade-Offs Between Financing with Long-Term Debt and Common Stock
- Capital Structure Theory
- Business and Financial Risk
- Target Capital Structure
- Other Consideration in Capital Structure Decision
- Capital Structure in Not-For-Profit Organizations

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Different Capital Structures

- Optimal Capital Structure
  - Mix of LT debt and equity that produces the lowest overall WACC
- Important factors in determining optimal capital structure:
  - The company's operating risks
  - Its immediate and expected LT financing needs
  - Relative costs of debt and equity at the time funds must be raised
  - Attitude of the board and senior management towards risk-taking
- Target Capital Structure
  - The estimated "best" and/or most practical mix of capital that will be used for future financing.

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Capital Structure Theory

- Trade-Off Theory
  - Companies trade-off the use of debt and equity to find the lowest WACC
  - Assumes that at some point the increasing costs of financial distress outweigh the benefits of using debt
  - This point represents the lowest WACC
  - Does not take into account industry or firm- specific factors

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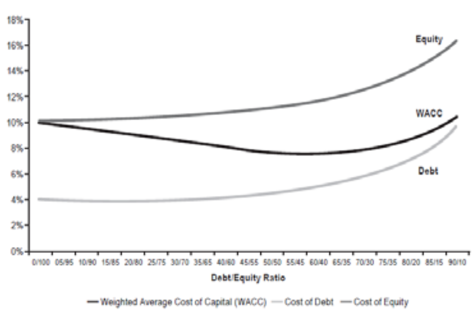
Cost of Capital



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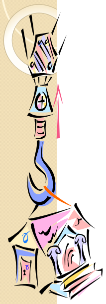
Advantages of Using Debt Financing



- Debt usually costs less due to lower risk and tax-deductibility of interest
- Payments on LT debt are usually fixed, or limited – providing more return to equity
- Capital markets for debt are usually very efficient across a broad range of options
- If funds are raised through debt, the earnings to equity holders will not be diluted
- Debt holders do not get to vote in elections, providing a control advantage to the equity holders

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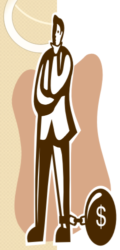
Disadvantages of Debt Financing



- Debt has a priority of claim over equity and is paid from pre-tax earnings
- Debt service must be made in a timely manner or the company runs the risk of financial distress
- Debt increases the financial risk of a company
- Debt can be accompanied by liens on assets
- Debt financing may involve covenants or other restrictions on senior management decisions and actions to protect the lender

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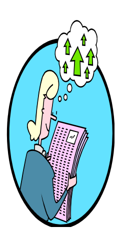
Advantages of Stock Financing

- Common stock does not obligate a company to make fixed payments to investors
- Common stock does not mature
- For creditors, stock offers a cushion against losses – also if a company is profitable, additional stock can be sold at attractive terms to the issuer



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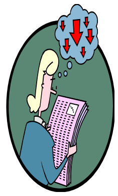
Disadvantages of Stock Financing

- May extend voting rights and control to more shareholders and shareholder value may be diluted
- Underwriting costs of new common stock are often significant
- No tax shield provided with common equity financing – and after-tax cost of equity is usually higher than debt
- Issuing shares to more shareholders can erode the stock price, especially if net income is not sufficient to maintain or increase EPS



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Business and Financial Risk

- In determining a company's capital structure policy, the total risk of the company's operations and financing must be considered.
- Total risk includes:
  - Business risk – related to the stability and predictability of a company's revenue stream, the greater the volatility, the greater the risk
  - Financial risk – related to the variability of the company's after-tax profits, usually due to costs of financing

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Raising Long-Term Capital

- The ability to raise capital at a reasonable price is one of the primary determinants of L-T success
- Advantages of private placement:
  - Less-restrictive covenants
  - Relatively small issue size
  - Reduced time to issuance
  - Minimal reporting, ratings or disclosure
  - Lower costs
  - Control over who holds debt

- Advantages of public offerings
  - Access to capital markets offers the potential to raise large amounts of capital at prevailing rates
- Disadvantages of public offerings
  - Increased disclosure and filings
  - Capital costs can fluctuate widely
  - Need to deal with a wide variety of different parties

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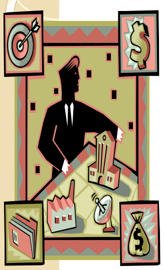
Cost of Capital



- The overall cost of capital for a company is a function of the mix of capital components used and the individual costs of the components
- The dividend decision will impact the cost of capital, as dividends will reduce the level of retained earnings – which is generally the least expensive source of equity capital

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Cost of Capital and Firm Value

- Cost of capital is the basic target number that asset returns must exceed if the company is to create shareholder value
- Capital Components and Costs
  - Primary sources of "permanent" capital are long-term debt (bonds) and equity (common stock and retained earnings)
  - The relevant costs of these sources are their marginal cost
  - Be sure to use only after-tax values for the costs
- Typically calculated as WACC
  - Weighted Average Cost of Capital

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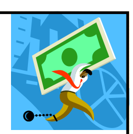
Cost of Debt



- Relevant cost is after-tax YTM
- After-tax k_d = Before-tax $k_d(1 – T)$
- Calculation Example – Assume YTM of 5% and marginal tax rate of 30%:
  - After-tax k_d = 5%(1 – .3) = 3.5%
- In companies with complicated tax liabilities, the marginal tax rate may be difficult to estimate from standard financial statements
- Though flotation costs of debt are usually low, they should be considered if they are significant

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Cost of Common Equity

- Two sources of common equity
  - Retained earnings during the period
  - Issue new common stock
- CAPM may be used to estimate the market's required rate of return on equity
- Flotation costs are usually not considered for retained earnings, but may be significant for new common stock issues

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Common Equity Calculation Example

- Assume a risk-free rate of 4.0%, a return on the stock market of 10.0% and a Beta of 1.2
- In this case the cost of equity is:

$$r_E = r_{RF} + (r_M - r_{RF})\beta$$
$$= .04 + (.10 - .04)(1.2) = .112 \text{ or } 11.2\%$$

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Weighted Average Cost of Capital (WACC)

$$\text{WACC} = W_D r_D (1 - T) + W_E r_E$$

- Assume 1/3 of total financing is from debt and 2/3 is from equity, and the costs of debt and equity are those found on previous slides:

$$\text{WACC} = W_D r_D (1 - T) + W_E r_E$$
$$= [.333 \times 0.05 \times (1 - 0.3)] + (.667 \times 0.112)$$
$$= 8.64\%$$

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Firm Value

- According to EVA (Economic Value Added) concepts, a firm must earn a rate of return on assets that exceeds the cost of capital in order to create shareholder value
- Assume a tax rate of 30%, \$50M of capital employed and an operating profit of \$6.8M

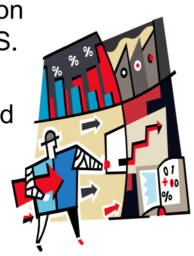
$$\text{EVA} = \text{EBIT}(1 - \text{Tax Rate}) - (\text{WACC})(\text{L-T Debt} + \text{Equity})$$
$$= \$6{,}800{,}000(1 - .30) - (.0864)(\$50{,}000{,}000)$$
$$= \$4{,}760{,}000 - \$4{,}320{,}000 = \$440{,}000$$

Lease Financing and Management

- Why Companies Lease
- Types of Leases
- Estimated Residual Value
- Tax Considerations for U.S. Corporations
- Lease Versus Borrow-and-Buy Decision

Equity Financing and Management

- Initial Public Offerings (IPOs) and the Decision to List Stock in the U.S.
- Shareholder Rights
- Financing Mergers and Acquisitions
- At the Market (ATM) Programs



IPOs & Listing Stocks in U.S.

- What is an IPO?
- Advantages of Going Public
  - May allow owners to diversify
  - Going public can help to resolve liquidity problems
  - The market can help determine value for company
  - Can be used to spin off division or subsidiary
- Disadvantages of Going Public
  - SEC disclosures
  - Managerial flexibility
  - Control
  - Exposure to market conditions

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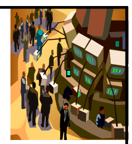
Decision to List Stock



- Advantages of Listing Stock
  - Marketability increases
  - Stock can be traded more widely
  - Can result in higher sales from increased exposure
  - Increased level of disclosure may lower WACC
- Disadvantages of Listing Stock
  - Additional reporting requirements
  - Restrictions on types of stocks that can be traded
  - Higher costs charged by exchanges

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Other Topics in Financial Decisions

- Dividend Policy
- Tax Strategies
  - Will have a major impact on financial decision making
  - Especially a problem for global companies that have to deal with many tax codes

- Repatriation of Capital for MNCs

- Market Analysis and Research Tools
  - Portfolio investment decisions
  - Acquisitions & divestitures
  - Evaluating credit & counter-party risk
  - Comparisons to other companies or industry avg.

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Dividend Policy

- Decisions relating to dividend policy have a significant impact on capital structure
- Steadily increasing dividends make a company's stock more attractive to certain institutional investors
- But – dividends represent money flowing out of the company, reducing the amount of internally generated funds available for future growth
- This may make the company's stock less attractive to investors looking for growth and capital gains
- Concept of *"Dividend Catering"*

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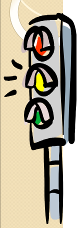
Other Factors for Dividends



- Dividend policy and the cost of capital
  - Depends on each company's situation
- Information content of dividends
  - Signaling effects from dividends
- Clientele effect
  - The dividend policy can affect who owns a company's stock
- Stability of dividends
  - Related to the info content of dividends – the more stable the dividends the clearer the signal being sent to investors

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Dividend Considerations

- Dividend Payment Procedures (Dates)
  - Declaration /Record/Ex-dividend/Payment
- Dividend Reinvestment Plans (DRIPs)
- Types of Dividends
  - Cash/Stock/Special/Liquidating
  - Stock splits
- Stock Repurchases (see next slide)
- Intra-company Dividends
- Taxes on Dividends

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Stock Repurchases

- Advantages
  - Reduces the number of shares outstanding
  - Increases earnings per share
  - Increases the market price per share
- Disadvantages
  - Investors may view it as just a ploy by management to “pump up” the stock price
  - May indicate the company does not have any good investment alternatives
- Managing a Repurchase Operation
- Repurchased stock becomes “treasury stock”

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Repatriation of Capital for MNCs

- Multinational Company Dividends
- Management Fees
- Transfer Pricing
- Intra-company Loans
- Deemed Dividends
- Restrictions on Dividends

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Session Wrap-up

Session 5: Capital Structure Decision & Management

- ***What did we learn in this session?***
- ***What topics do we need to learn more about?***

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End of This Session

We will reconvene after lunch (1:30 pm)

The topic will be:

More Key Concepts

Money Markets