

## Ch10 Lecture Notes

### Financing and the Value of Money

Value: quantity, timing, and opportunity cost

Take into account: plan, execute, and review

Obtaining money (financing):

**Debt:** obtaining money from lenders

**Equity:** obtaining money from owners

Borrowing Money:

1. Why is the borrower borrowing?
2. How much does the borrower need?
3. How is the borrower going to repay the loan?
4. When will the borrower repay the loan?
5. Does it make sense to lend to the borrower?

Pre-Tax Cost of Debt:

$R_d = R_f + \text{Risk Premium}$

After-Tax cost of debt:

$R_D = R_d (1 - \text{tax rate})$

The cost of Equity:

$R_E = R_f + \text{Risk Premium}$

The Weighted Average Cost of Capital:

$WACC = \% \text{ of Debt} * R_d * (1 - T_x) + (\% \text{ of equity})(\text{Cost of Equity})$

Realities of the WACC:

- **Debt is cheaper than equity!**
- Business typically uses all the debt it can afford to finance its investments
- A business can afford debt when it is comfortable that it can repay the debt as agreed
- When a business is not comfortable that it can repay the debt as agreed, the -- business should use equity

Minimizing the WACC:

- The optimal blend of debt and equity
- Debt/ equity is that point that the cost of debt increases because lenders have significant concern that the business cannot repay the loan as agreed (default risk).
- Maximizes as long as debt minimized the average weighted cost of money

How do you invest money to maximize value?

The key: invest money so that the **operating profit > net income**

Investing in assets: Techniques

1. Net Present Value
2. Internal Rate of Return
3. Accounting Rate of Return
4. Payback

Investing in assets = Financing (debt & equity)