ENG 111
Week 1 Discussion: Introduction to Corporate Finance

Corporate Finance deals with how businesses make monetary decisions (raising funds, making investment decisions, etc.)

Finance Addresses the following 3 questions
- What long-term investments should the firm choose? – Capital Budgeting
- How should the firm raise funds for the selected investments? – Capital Structure
- How should short-term assets be managed and financed? – Net Working Capital

Forms of Business Organizations
- Sole Proprietorship
- Partnership (general, limited)
- Corporation (private, public)

Pros and Cons of Going Public
Pros:
- Obtain money that does not have to be repaid*
- Increased visibility
- Market valuation

Cons:
- Going public is costly
- Management loses some of its freedom to act without board approval
- Open to scrutiny
- Public reporting
- Company may be taken over

Agency Problem occurs when a person or organization (principal) hires another person to represent them (agent.) The agent may not fully represent the principal and act on a conflict of interest. For example, your real estate agent may try to make you purchase an expensive house because they get a percentage of the sales price as commission.

Example 1: ABC Corporation hires Bill the Banker to help negotiate the purchase of the XYZ Company. Bill owns 10,000 shares in XYZ. Identify the principal and agent and what conflicts of interest might arise?

Principle: ABC Corporation
Agent: Bill

Since Bill owns XYZ, he would have an interest in making ABC pay the highest price possible for XYZ, which is not in the best interest of ABC owners.

Balance Sheet: Is a snapshot of what a company owns (Assets) and how it's financed (Liabilities and Equity.)

Simplified Balance Sheet	
Assets	
Current Assets	50
Fixed Assets	200
Other Assets	30

Total Assets	280
Liabilities	
Current Liabilities	20
Long-Term Liabilities	100
Total Liabilities	120
Equity	
Common Stock	100
Retained Earnings	60
Total Equity	160

-Current Assets: Easily convertible to cash or will be converted soon. Examples cash, accounts receivables, inventory.
-Fixed Assets: Land, Property, Equipment minus depreciation.
-Other Assets: Trademarks, patents, prepaid expenses.
-Current Liabilities: Debt that is short-term.
-Long-Term Liabilities: Debt issued with a time-frame 1 year or longer.
-Common Stock: Equity raised through sale of stock.
-Retained Earnings: The sum of earnings (net income) from the past.
Within each group items are ordered from most liquid to least liquid.
Current Ratio = Current Assets/Current Liabilities (1)
Net Working Capital = Current Assets – Current Liabilities (2)

It's good to remember that what you own must equal how you financed it:

Assets = Liabilities + Equity

<u>*Example 2:*</u> Your CFO informs you that you need to purchase $10 of inventory. You can purchase the inventory or finance it with short-term debt. Identify the changes to the balance sheet and calculate the net working capital under both scenarios.

Purchase the inventory:

Simplified Balance Sheet	
Assets	
Current Assets	*50*
Fixed Assets	*200*
Other Assets	*30*
Total Assets	*280*
Liabilities	
Current Liabilities	*20*
Long-Term Liabilities	*100*
Total Liabilities	*120*
Equity	
Common Stock	*100*
Retained Earnings	*60*
Total Equity	*160*

Cash will go down by 10 and Inventory will go up by 10, leaving the Current Assets and the remainder of the Balance Sheet the same. Net Working Capital is CA-CL=50-20=30.
Net Working Capital did not change but company became slightly less liquid (cash turned into inventory!)

Alternatively, we can ***finance the purchase of inventory*** *via short term debt, in which case notes payable which is a current liability will increase. Under this scenario, the size of the Balance Sheet is increasing from 280 to 290. Net Working Capital = CA-CL=60-30=30. Net Working Capital did not change but company became more in debt (short term debt went up!)*

Simplified Balance Sheet	
Assets	
Current Assets	*60*
Fixed Assets	*200*
Other Assets	*30*
Total Assets	*290*
Liabilities	
Current Liabilities	*30*
Long-Term Liabilities	*100*
Total Liabilities	*130*
Equity	
Common Stock	*100*
Retained Earnings	*60*
Total Equity	*160*

Example 3:
A business owned by a single individual is called a:
A. Corporation
B. Sole Proprietorship
C. General Partnership
D. Limited Partnership
E. Limited Liability Company

Solution to Example 3:
B

Example 4:
A general partner:
A. Has less legal liability than a limited partner
B. Has more management responsibility than a limited partner
C. Faces double taxation where as a limited partner does not
D. Cannot lose more than the amount of his/her equity investment
E. Is the term applied only to corporations which invest in partnerships

Solution to Example 4:
B

Example 5:

Suppose you own 100 shares of IBM stocks which you intend to sell today.
Since you will sell it in the secondary market, IBM will receive no direct cash flow as a result of your sale.
Why the, should IBM's management care about the price you get for your shares?
Solution to Example 5:
The stock price directly reflects the position of the corporation.
If stock price is low, market does not value the corporation. Whenever the company needs further funding, the cost will be high (negotiation power of the company will be weak) if the stock does not have a good standing.

Example 6:
Agency costs refers to:
A. The total dividends paid to stockholders over the lifetime of a firm
B. The costs that result from default and bankruptcy of a firm
C. Corporate income subjected to double taxation
D. The costs of any conflicts of interest between stockholders and management
E. The total interest paid to the creditors over the lifetime of a firm

Solution to Example 6:
D

Example 7:
Which one of the following actions by a financial manager creates an agency problem?
A. Refusing to borrow money when doing so will create losses for the firm
B. Refusing to lower selling prices if doing so will reduce the net profits
C. Agreeing to expand the company at the expense of the stockholder's value
D. Agreeing to pay bonuses based on the book value of the company stock
E. Increasing current costs in order to increase the market value of the stockholder's equity

Solution to Example 7:
C

Example 8:
Managers are encouraged to act in the shareholder's interests by:
A. Shareholder election of a board of directors who select management
B. The threat of a takeover from another firm
C. Compensation contracts that tie compensation to corporate success
D. Both A and B
E. All of the above

Solution to Example 8:
E

Example 9:
Which one of the following assets is generally the most liquid?
A. Inventory
B. Buildings
C. Accounts Receivables
D. Equipment
E. Patents

Solution to Example 9:
C

Example 10:
Using the following information for Company ABC, create a balance sheet for the year 2017:

Inventory 2,000
Accounts Receivable 6,500
Office Building 10,000
Common Stock 5,000
Cash 5,000
Short term Loans 4,000
Owed to supplier 2,500
Machines 3,000
Bonds 12,000
Intangible Assets 5,000
Retained Earnings ?
Deferred Taxes 1,000

Solutions to Example 8:

Assets:
Current Assets:
Cash: 5,000
Accounts Receivables: 6,500
Inventory: 2,000
Total Current Assets: 13,500

Property Plant and Equipment: 13,000
Intangible Assets: 5,000
Net Assets: 31,500

Liabilities:
Current Liabilities:
Accounts Payable: 2,500
Short Term Debt: 4,000
Total Current Liabilities: 6,500
Longterm
Debt: 12,000
Deferred Taxes 1,000
Net Liabilities: 19,500
Equity:
Common Stock: 5,000
Retained Earnings: 7,000
Net Equity: 12,000

We always need to make sure that the Balance Sheet balances:

31,500 (A) = 19,500 (L) + 12,000 (E)

Example 11:

a) Given the following information, do you know if Windswept distributed any dividends in 2008?

710-530=180 is addition to retained earnings. Therefore 481-180=301 is distributed to shareholders as dividends.

b) Do you know if Windswept purchased or sold any fixed assets from 2007 to 2008?

If we were given the gross fixed assets number, we could take the difference and find it out but we are given the net fixed assets. The difference in net fixed assets from 2007 to 2008 is 3600-3150=450. However, this includes the depreciation of 400, that is, even without selling anything, fixed asset value would go down by 400. Therefore, if the company purchased and sold any fixed assets from 2007 to 2008, we can deduce the value of sold fixed assets were higher by 50 than the purchased ones!

Windswept, Inc.
2008 Income Statement
($ in millions)

Net sales	$8,450
Less: Cost of goods sold	7,240
Less: Depreciation	400
Earnings before interest and taxes	810
Less: Interest paid	70
Taxable Income	$ 740
Less: Taxes	259
Net income	$ 481

Windswept, Inc.
2007 and 2008 Balance Sheets
($ in millions)

	2007	2008		2007	2008
Cash	$ 120	$ 140	Accounts payable	$1,110	$1,120
Accounts rec.	930	780	Long-term debt	840	1,210
Inventory	1,480	1,520	Common stock	3,200	3,000
Total	$2,530	$2,440	Retained earnings	530	710
Net fixed assets	3,150	3,600			
Total assets	$5,680	$6,040	Total liabilities & equity	$5,680	$6,040