Chapter 7 Stock Valuation

1) What is the difference between lending to a company and owning a company? Lending gets a fixed return

Lending is more certain

Owning has an uncertain return

Owning gets the benefits of good decisions

Owners share losses with lenders

- 2) Define the following:
 - a. Authorized shares

Corporation set in incorporation agreement

b. Issued shares

Total number from authorized that have been distributed Not all currently in hands

c. Outstanding shares Currently owned by investors

Get the profits; get to vote; receive the dividends

d. Treasury Stock

Repurchased shares Why do companies buy back stock? Will discuss in more detail in later chapters

3) What does dilution of stock ownership mean?

Profits are divided amongst a greater number of owners If you issue shares to buy something, the old shareholders will need to share the profits

4) ADR

What is an ADR? Play video

https://www.youtube.com/watch?feature=player_detailpage&v=XdZPNrCpEeQ&list=PLQ cenk-Mor85pMNCHKTG2S79A8AL_9Ssw

5) How the Stock Market works!! Watch the video

http://www.youtube.com/watch?feature=player_detailpage&v=GnJCOof2HJk

6) How do you make money with stocks?

Dividends taxes? 15% max

Capital appreciation taxes

Short term marginal rate

Long term 15% max

7) How are stock prices created? Supply and demand

Discussed in earlier class

8) What does Market Efficiency mean? Information is incorporated into the stock price.

of the stock

Questions

Do prices move in the right direction? How long does it take to happen?

What kind of information is there? Historic Public = historic + current events Private

EMH forms based on these categories

Weak - historic If you have historic information can you

beat

the stock market on average?Semi_strongIf you have public info?StrongIf you have private info?

Behavioral finance may be the new "theory" behind prices.
People just do not act rational.

Alan greenspan was on the Daily show. Basically said everyone assumed people were logical and rational. Turns out they are "screwy".

http://www.youtube.com/watch?feature=player_detailpage&v=h5JDftgykcg

10) Stock valuation models

$$P_0 = \frac{D_0 \times (1+g)^1}{(1+r_s)^1} + \frac{D_0 \times (1+g)^2}{(1+r_s)^2} + \dots + \frac{D_0 \times (1+g)^\infty}{(1+r_s)^\infty}$$

$$P_0 = \frac{D_1}{r_s - g}$$

11) You are considering a common stock that has a required return of 14%. This stock has paid a dividend of \$1.75 every year in the past. What is this stock worth?

Ks	<mark>14.00%</mark>	Stock Price	
g	0.00%	Expected return	#DIV/0!
D ₁	\$1.75		
Stock Value	\$12.50		
To Find Ks		Dividends (TV)	
RF		First	
Km		Last (D ₀)	\$1.75
Beta		N	
Ks	0.00%	g (if not given)	#DIV/0!

12) What are the basic investment rules?

If value >= price buy If expected return >= required return buy

13) The most recent dividend paid by the corporation was \$3.20. Historically, this company's dividends have been growing at a 6% growth rate. The required return on the stock is 14%. What is the value of the stock?

Ks	<mark>14.00%</mark>	Stock Price	
g	6.00%	Expected return	#DIV/0!
D ₁	\$3.39		
Stock Value	\$42.40		
To Find Ks		Dividends (TV)	
RF		First	
Km		Last (D ₀)	\$3.20
Beta		N	
Ks	0.00%	g (if not given)	#DIV/0!

- a. What if the growth rate changed to 3%? 9%?
- b. What if the required return decreases to 10%? Increases to 18%?

- 14) Go to finance.yahoo.com. Enter TAP in the quote box. On the left hand side find historical prices. Click the radio box for dividends only. Change the beginning date to the same date as the ending date but subtract 5 from the years. Download to a spreadsheet and copy paste as a picture here. Circle each four dividends. Number the circles starting with zero. In the stock valuation spreadsheet determine the historical growth of dividends.
- 15) What is the beta of your company? What yield did we find for a 30 year Treasury? For now use 12% as Km. What is the required return?
- 16) When would the dividend model not work? No dividends Dividend growth greater than required return
- 17) What variables are needed for the FCF model? FCF, growth of FCF, WACC avg cost of financing
- 18) What is the PE multiplier model? Algebraically manipulate the PE ratio Substitute forecasts of PE and / or EPS for the numbers in the PE ratio
- 19) Some interesting you tube videos
 - a. Value investing <u>http://www.youtube.com/watch?v=dX2L7JhpXl8&feature=player_detailpage</u>
 - b. How to read stocks <u>http://www.youtube.com/watch?feature=player_detailpage&v=Lc791is6X0o</u>
 - c. A formula (untested but interesting concept) <u>http://www.youtube.com/watch?v=UOWrhGmCsIA&feature=player_detailpag</u> <u>e</u>

Offline Homework (20 points) _____ Research (100 points) _____

Name of Company and Ticker _____

Go to the <u>www.zacks.com</u>

Enter your company name or ticker symbol.

1) Go to Company Reports and then to estimates.

a) Estimates (5)

List 3 of the estimates from this source

EPS

PE

Earnings growth rate

Compare to estimates in chapter 3 or with the yahoo finance data.

Are there any discrepancies? Describe them?

2) go to yahoo finance and find the Insiders (10) insider roster

- a) Who are the three largest holders in the past 2 years, as listed in the insider roster?
- b) what percentage of the company is held by insiders?

take the number of shares held by insiders and divide by the total number of shares

can also switch to key statistics section.

3) Calculate the value of your company's stock. Include the calculations for growth of dividends and the calculation for the required return using the SML.(40)

BetaDividends 5 years agoMost recent dividendsYield on 30 year T-BondAverage stock market returnPE ratioEPS estimate for next year

Complete the following table"

Use the Statistics above to calculate:

- 1) Dividend growth model value
- 2) PE multiplier model value

5) Go to <u>www.smartmoney.com</u> (50 pts)

Enter your company's ticker symbol and go to key statistics.

In the table below record the data.

Then repeat the exercise for the other companies listed

ROE and price to book found under key stats

Name	Ticker symbol	Dividend	Dividend Yield	ROE	price to book ratio
Your company					
	DIS				
	AIT				
	MRK				
	LG				
	LUV				
	ТАР				
	GE				
	BUD				
	PFE				

Which companies have the highest dividend yields? Lowest?

Is there any relationship between ROE and dividend yield

what does price to book ratio say? Can you describe what this means for these companies?

Chap 07 Offline Homework Exercise 21 points

- 1) Four years ago I purchased 100 shares of the XYZ Corp preferred stock. The company pays a \$6.75 annual dividend and had a required return of 19%. The most recent required return for the stock is 14%. (3 points) (Stock Valuation worksheet)
 - a) What was the stock value when purchased ?

35.53	

b) What was the stock value at the end of the time frame?



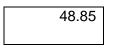
c) What is the gain (loss)?



- 2) A small business has decided to seek new investors for expansion. The company has recently paid a \$4.75 dividend. The average required return for the industry is 17% Dividends have historically grown at a 6% interest rate. The new expansion of the company will increase dividend growth to 10% for the next 4 years. After that, the managers have decided the growth rate will recover to the industry standard. (6 points) (super-normal growth Valuation)
 - a. What is the value of the company's stock today?

52.09

b. What would the value be if the growth rate grew to 8% in the new period?



c. What would the value of the firm be if the super growth period was 6 years instead of 4 years?

3) Complete the following PE multiplier model valuation table. (4 points)

Firm	PE	EPS	Value
A	12.5	3.95	<mark>49.38</mark>
В	<mark>5.31</mark>	5.25	27.89
С	17.5	<mark>2.85</mark>	49.78
D	15.5	1.75	<mark>27.13</mark>

- 4) Calculate the following values: (10 points)
 - a. In 1992 the company paid a dividend of 2.89. In 2012, the dividend was 4.89. What is the growth rate of dividends? (stock Valuation)

/	
2.66%	

b. The company has a beta of 1.79. The risk-free rate and return on the stock market are 3.67% and 11.5% respectively. What is the required return for the company?

	_	
		17.69
C.	What is the risk premium for the company?	
		14.02%
d.	What is the value of the company stock?	
		33.40

e. If the company completes a renovation that reduces the market risk of the company to a beta of 1.35, what is the new value of the stock?

43.35	