**MIDTERM II – REVIEW**

SECTION III (25 POINTS) – STOCK MARKET

Stock buy/sell and dividends– calculate profit, HPR% with and without Margin (Ch 10)

You buy 100 shares of XYZ stock at 100 and sell it at 120 a year later. You borrow 50% at 5.0% interest and while you were holding the stock you received $2 per share dividend. Calculate the profit and HPR%.

CF0

Buy 100 shares x $100 = ($10,000)

Borrow 50% $5,000

Net Investment $5,000

CFOx

Sell 100 shares x $120 $12,000

Pay loan $(5,000)

Pay interest (1 yr) $(250)

Receive Div $2x100 $200

Net Proceeds $6,950

Less Investment $(5,000)

Profit $1,950

HPR% = Profit/Invest $1,950/5,000 = 39%

Dividends added to Income Proceeds

Reduce Sales/Income Proceeds by the cost of leverage = Net Sales Proceeds

Net Sales/Income Proceeds less Total Basis = Gain or (Loss)

Gain (Loss) / Equity Basis = HPR

Stock Valuation Methods (Methods 1-5): (Ch 10)

* METHOD 1: Market Value Method - Current Stock Price: Enterprise Value = (Share Price \* OS) + Net Debt

EV = (SP x SO) + D - C

* METHOD 2: Intrinsic Value Method – CAPM (Beta) – CAPM= Rf + Beta \*(Rm – Rf)

V = (Target Stock Price + Div.) / (1 + CAPM)

* METHOD 3: Dividend Discount Method – discount the expected future dividend at the CAPM less the growth rate – Dividend Perpetuity Method (same as real estate cap rates)

V = (Div this year or Next Year’s Div) / (CAPM – Growth)

Next Year’s Div = Div x (1+g)

* METHOD 4: Comparable Company Method – Use an EBITDA Multiple from comparable traded companies (to generate Enterprise Value) \* EBITDA less Net debt = Equity Value
  + [(Multiple \* EBITDA) – Net debt] / Shares Outstanding

EV = EBITDA X EBITDA MULTIPLE (INDUSTRY)

* METHOD 5: Comparable Transaction Method – Use an EBITDA Multiple from recent transactions involving comparable companies (to generate Enterprise Value) \* EBITDA] less Net debt = Equity Value
  + [(Multiple \* EBITDA) – Net debt] / Shares Outstanding

EV = EBITDA X EBITDA MULTIPLE (TRANSACTION)



SECTION IV (25 POINTS) – (Ch 11) – BOND MARKET

Price and Invoice Price (includes accrued interest on bonds, must be based on “Settlement Date” not Trade Date = SD = TD + 3 “Business Days”)



YTM, YTC, YTW, Current Yield (quick and dirty: Annual Coupon / Price)

YTC = YTM: use Redemption Value from Call, and Call Date as Maturity Date



Excel Formulas

YTM =yield (S,M,CR,P,R,F)

YTC =yield S, Mc, CR. P, Rc, F)

YTW – just type the lowest of all the yields

CY = (Annual Coupon $) /(Price of the Bond) = 80/985 = 8.1218%

Price / Duration

Macaulay Duration = Total % Weighted (of Total PV Pmt Streams) Bond PV Payment Streams / 2

