

Question 1 (25 Points)

Tony is a risk-averse investor. He plans to invest in fixed income securities. One investment company shows him two bonds – Bond X and Y. Both pay 9% coupon interest rate with \$1,000 par value. The difference is that bond X has 25 years to maturity, while bond Y has 7 years to maturity.

1.1 Draw an investment time line for each bond. If Tony's required rate of return is at 12%, how much should he pay for bond X and Y? **(5 points)**

1.2 From bond prices in **(1.1)**, calculate Current Yield and Capital Gain/Loss Yield of each bond. Explain how these yields are related to each other. **(5 points)**

1.3 What will be the value of these two bonds when the going YTM or rate of interest become 15%? Calculate percentage change in price, compared with prices at 12% required rate of return, and fill in below table **(10 points)**

YTM	Bond X		Bond Y	
	Price	Change (%)	Price	Change (%)
12%				
15%				

1.4 Which bond should you recommend Tony to purchase? Why? **(5 points)**

Question 2 (25 Points)

Storico Co. just paid a dividend of \$2.75 per share. The company will increase its dividend by 20 percent next year and will then reduce its dividend growth rate by 5 percentage points per year until it reaches the industry average of 5 percent dividend growth, after which the company will keep a constant growth rate forever. According to market research, the company's beta is 1.4 when the risk-free rate is 5.6% and the market risk premium is 6%.

2.1 Draw an investment time line presenting dividend payment plan of Storico. **(5 points)**

2.2 If one investor intends to hold Storico's stock for **only 2 years** and expects to sell at \$55 at the end of year 2, what will be a proper stock price for the investor? What should be appropriate investment strategy (i.e. to buy, sell, or hold) if Storico's current market stock price is \$45? Why? **(10 points)**

2.3 An investor has a long-term investment plan in Storico in that he has no plan to sell in a short period of time. According to the above information, what is the value per share of Storico's common stock? And what should be appropriate investment strategy (i.e. to buy, sell, or hold) if Storico's current market stock price is \$45? Why? **(10 points)**