Introduction to Finance
Quiz 6 *December 3, 2019*

1. ITT Corp has 6-year bonds outstanding–the bonds mature exactly 6 years from today. The bonds pay a 5% coupon on a standard 6-month basis. The continuously-compounded yield to maturity on this bond is 3.3%. The continuously-compounded yield on a 6-year US Treasury note (term-matched to the ITT bond) is 1.60%.

   (a) **(10 points)** What is the credit spread on this ITT bond?

   (b) **(10 points)** What is the continuous hazard rate that describes the market's expected loss on this bond?

   (c) **(10 points)** According to the market, what is the probability that this bond will be worth nothing at any time prior to its maturity date.

   (d) **(10 points)** What is the expected return on this bond?

2. L3Harris Corp has just issued a 3-year bond that makes 6% annual coupon payments. Your analysis of this company suggests that the appropriate (continuous) hazard rate characterizing loss over the 3-year horizon is 80 basis points (0.8%). Term-matched 3-year US Treasury notes have a continuously-compounded yield to maturity of 3%.

   (a) **(10 points)** What are your expected future cash flows on this bond?

   (b) **(20 points)** Assuming that the market agrees with your subjective hazard rate assessment, what is the market value of this bond?

   (c) **(10 points)** What is the expected return on this bond?

3. Today is August 31, 2022. Weyerhauser has just issued 2-year, 7.5% notes that sell for par. The continuously-compounded yield to maturity on the term-matched 2-year US Treasury note is 4%.

   (a) **(10 points)** Provide a timeline of the expected future cash flows on this bond?

   (b) **(10 points)** What is the expected return on this bond?