Introduction to Finance - II

Quiz 3 *February 11, 2020*

Read the questions carefully. Don't make them harder than they are! Answer succinctly and precisely. **Show all of your work.**

1. Suppose that we pull the following monthly return data from a source such as WRDS for the stock Weyerhauser (WY) and the stock market.

Date	Returns	
	WY	Market
20190131	0.0	0.01
20190228	-0.01	0.0
20190329	0.025	0.02

   (a) **(30 points)** What is Weyerhauser's beta?

   (b) **(15 points)** What percentage of the variance of Weyerhauser's returns is diversifiable?

2. Suppose that you work for L3-Harris and your statistical and economic analyses provide the following information: L3-Harris beta: 1.3; standard deviation of monthly returns of L3-Harris stock: 10%; standard deviation of monthly returns on the US stock market: 3%; annual risk-free rate: 3.5%; annual expected return on the US stock market: 7.5%.

   (a) **(20 points)** According to the CAPM, what is the annual expected return on L3-Harris' stock?

   (b) **(20 points)** What percentage of L3-Harris' variance is diversifiable?

(c) **(15 points)** Like L3-Harris, Boeing has a beta of 1.3. However, Boeing's stock is much more volatile than that of L3-Harris. Its monthly return standard deviation is 13%. Does Boeing have a higher cost of equity capital than L3-Harris? *Explain.*