

Introduction to Finance - II  
Quiz 1 *January 27, 2020*

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

Suppose that we pull the following data from a source such as WRDS for 2 stocks, ITT and NOC:

Date	Price	ITT		Price	NOC	
		\$ Dividend	Stock Distribution*		\$ Dividend	Stock Distribution*
20110831	67.29			146.15		
20110930	68.07	.25		46.78		2.0
20111028	52.57		0.5	48.28	0.55	
20111130	48.32			50.00		

\* Number of additional new shares for every old share.

1. **(25 points)** What are the monthly returns that you can compute from these data? (Show the computations and returns.)

2. Suppose that on August 31, 2011, ITT had 30 million shares outstanding.

- (a) **(10 points)** What was ITT's market capitalization of equity on August 31, 2011?

(b) **(15 points)** ITT had no repurchases between August 31, 2011 and November 30, 2011. What was ITT's market capitalization of equity on November 30, 2011?

3. **(10 points)** What is the mean monthly return of ITT over this period?

4. **(20 points)** What is the standard deviation of ITT's monthly returns over this period?

5. **(20 points)** If we assume that ITT monthly returns are normally distributed what are the 95% bounds for its monthly returns?