

FN212: Financial Modelling

2021

Mr. Alan O'Sullivan

Continuous Assessment 2

This continuous assessment accounts for 35% of the final grade

Rules:

- This is an individual assignment.
- The solution spreadsheet must be uploaded via the link on Moodle no later than 5pm on **Tuesday the 6th April.**
- No solutions will be accepted after that time
- It is your responsibility to upload the file on time; I strongly suggest that you check beforehand that your file is not corrupted. If I cannot open/read your file it will not be accepted

Formalities:

Create: Excel Spreadsheet CA2 2021 to complete the excel work for Questions 1 & 2 that have been uploaded to Moodle
Both questions carry equal marks

Complete: Please ensure to include your **name** and **student number** clearly at the top of each excel workbook

Upload: When you upload your Excel answer file, rename with your name:
Joe Bloggs CA2 2021.xslm

FN212 CA 2 2021
Enterprise Value & Portfolios

Question 1:

Excel Spreadsheets required:

- Q1 WACC
- Q1 Free Cash Flows
- Q1 Enterprise Value

Answer all Parts

- a. Use the information on the spreadsheet **Q1 [WACC]** to calculate the cost of equity and the weighted cost of capital according to the relevant version of the Gordon Model.

- b. Use the information on the spreadsheet **Q1 [FCF]** to calculate the Free Cash Flows from 2007 -2011

- c. Use your answers from parts a) and b) to calculate the Enterprise Value according to the Gordon Model. If you did not do part b) assume the FCF at the end of 2011 is €500,000 and proceed from there.

(50%)

Question 2:

Excel Spreadsheets required:

- Q2 Data, Returns etc
- Q2 Efficient Frontier
- Supplementary

- a) The spreadsheet Q2 Data presents monthly returns for 5 companies. Calculate the mean and variance of each of the stocks and preferably, using matrix methods calculate the variance covariance matrix.
- b) Using the VCV matrix, construct a Portfolio with the following asset allocation;

Portfolio 1	
	Weights %
Apple	16.67%
Kellogg	16.67%
General	
Electric	16.67%
Bank of	
America	16.67%
Pfizer	16.67%
Exxon	16.67%

Portfolio 2	
	Weights %
Apple	10%
Kellogg	15%
General	
Electric	20%
Bank of	
America	40%
Pfizer	10%
Exxon	5%

Portfolio 3	
	Weights %
Apple	5%
Kellogg	15%
General	
Electric	15%
Bank of	
America	30%
Pfizer	15%
Exxon	20%

- c) Using Excel's graph functionality, graph Efficient frontiers for each portfolio
- d) Provide commentary on which Portfolio is optimal and why.

(50%)