

## AcF 502: Foundations of Finance

### Group Assignment

### Michaelmas Term

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**Submission deadline:** Week 10, Thursday 15<sup>th</sup> December 2022 at 12:00pm (noon).

The report should be uploaded on Moodle.

**The report is assessed as group work only.**

**The total weight of the report is 10% of the overall assessment for AcF502.**

#### **Important information:**

1. You will be allocated into groups by the postgraduate office. If you do not know your group, please contact the Postgraduate Office immediately.
2. The report should be limited to 1500 words (excluding tables and references). Please use font size 12 and 1.5 spacing. You are highly advised *not* to include appendix.
3. Each report must have a reference list that conforms to academic standards (Listing websites only is not sufficient). Good examples can be found in good journals such as the Journal of Finance, Management Science etc. ***Properly referencing and clearly citing sources of materials are important to avoid plagiarism.***
4. **No marks** will be given for purely quoting text and for any material included in the appendix of the report.
5. Please include the full name, the library card number of each group member and total word count in the front page of the report.
6. Please also fill and submit the Group Coursework Cover Sheet (can be found on Moodle).

## Instructions

Please choose 2 *non-financial* firms listed in the FTSEAll Index or S&P500 Index. The two firms can be from the same or from different industries. Make sure that your companies have at least five years of trading history and five annual financial statements (2017-2021 or 2018-2022).

- I. Estimate the two companies' beta and briefly explain how you get the estimates. Comment on the results and explain why they have similar/different betas. Can you say something about the stock prices and returns?
- II. Describe the capital structure of the firms and try to explain why it is chosen. Link the findings to the content of the lectures and/or required readings.
- III. Compare the firms and try to explain why capital structure decisions differ or not. The firms may have similar or different capital structures.
- IV. Include some critical evaluation of the decisions.

### Useful Tips:

#### For the two firms' betas:

1. For betas, work with *return* rather than price.
2. There are multiple ways to obtain a beta estimate. Some websites tell you directly what is the company's beta. However, try to start from scratch and think about how you can estimate a firm's beta from the data. Once you get your own estimate, you can compare it with those provided online.
3. How correlated are the two firms' return? Can you explain your findings?
4. What does beta represent, what is the definition of beta and what is the relation between beta and expected return? Do firms' betas change over time? Can beta help to explain the return observations?

#### For the two firms' capital structure:

5. Look at the benefits of debt, for example: What marginal tax rate does the firm face? Are there other tax deductions that this company has (like depreciation) to reduce the tax? Does your company have high free cash flows? Has it taken, and does it continue to have good investment projects? Will there be an advantage to using debt in this firm as a way of keeping managers in line, or do other (cheaper) mechanisms exist?
6. Look at the costs of debt, for example: How high are the current cash flows of the firm (to service the debt) and how stable are these cash flows (look at the variability in the operating income over time)? What are the accounting measures of a firm's financial health? How important is bankruptcy cost? How easy is it for bondholders to observe what equity investors are doing? Are the assets tangible or intangible? Are there any bond covenants? How much does your firm value flexibility?

Extra thoughts:

7. What is the influence of Covid on the two firms' capital structure? Do firms adjust their capital structure after Covid?