

GROUP WORK ASSIGNMENT

CORPORATE INVESTMENT ANALYSIS

MASTERS IN FINANCE

1ST SEMESTER 2014-2015

The group work assignment of CIA is a practical case of determining the cost of capital and the capital structure of an international corporation, after digging for relevant information. The case description follows, but you are advised to read first the rules of the game.

Rules of the Game:

- 1) Important Dates: The Deadline for delivery of the assignment is December 4th.**
The assignment should be handed in to Prof. Clara Raposo during the CIA class, or delivered at the reception of ISEG's building in Rua Miguel Lupi, No. 20;
- 2) Each group has a maximum number of 5 students.**
- 3) The assignment involves delivery of 3 elements:**
 - a. A brief **printed Report** written in Microsoft Office word, describing the situation, the procedure followed and the outcome. (MAXIMUM 10 pages A4);
 - b. A **Spreadsheet** in Microsoft Office **excel**, in a cd-rom or USB-pendrive, supporting the analysis of the written report;
 - c. A **Presentation** in Microsoft Office **powerpoint** summarizing the case, included in the CD-rom or USB-pendrive.

CASE DESCRIPTION: THE COCA-COLA COMPANY



The Coca-Cola Company is launching a new product that promises to boost its sales. For this project they are planning to invest \$9 million in fixed assets, with a life of 10 years. The new drink is expected to generate revenues of approximately 20% of the company's revenues of 2013, one year after the initial investment. However, sales of its older products should decrease by 5%. Over time, sales are expected to remain constant over those 10 years. The structure of operating costs (as a percentage of total revenues) is expected to be similar to what it's been for the last 3 years. As a newly hired expert in the capital budgeting division you have been asked to evaluate the new project. You will compute the appropriate costs of capital and the net present value using different valuation methods. You must seek out the information necessary to value the free cash flows. But you'll be given some direction to follow!

1. Go to <http://finance.yahoo.com>. Under "Market Data", you will find the yield to maturity for ten-year Treasury bonds listed as "10 Yr Bond (%)." Collect this number as your risk-free rate. Comment.
2. In the box next to "Get Quotes" button, type Coca-Cola's ticker symbol (KO) and press enter. Once you see the basic information for Coca-Cola, find and click "Key Statistics" on the left side of the screen. From the key statistics collect Coca-Cola's market capitalization (its market value of equity), enterprise value (its market-value equity + net debt), cash, and beta. Comment.
3. Calculate Coca-Cola's equity cost of capital using the CAPM, and a market risk premium of 5%. Comment.
4. To get Coca-Cola's cost of debt and the market value of its long-term debt, you will need the price and yield to maturity on the firm's existing long-term bonds. Go to <http://finra-markets.morningstar.com/BondCenter/Default.jsp>

Under "Bonds", "Quick Search", click "Corporate" and type Coca-Cola as the bond issuer. A list of Coca-Cola's outstanding bond issues will appear. Assume that Coca-Cola's policy is to use the expected return on ten-year obligations as its cost of debt. Find the bond issue that is as close to 10 years from maturity as possible. (*Hint: you will see a column titled "Callable"; make sure the issue you choose has "No" in this column. If that's not possible, take what you have, but callable bonds are worth less than non-callable bonds, ceteris paribus*) Find the

credit rating and yield to maturity for your chosen bond issue (it is in the column titled "Yield"). Hold the mouse over the table of Coca-Cola's bonds and right-click. Select "Export to Microsoft Excel." (*Note that this option is available in IE, but may not be in other browsers.*) An Excel spreadsheet with all of the data in the table will appear.

5. You now have the price of each bond issue, but you need to know the size of the issues. Returning to the web page, click "Coca-Cola" or its ticker in the first row. This brings up a Web page with all of the information about the bond issue. Scroll down until you find "Amount Outstanding" on the right side. Noting that this amount is quoted in thousands of dollars, record the issue amount in the appropriate row of your spreadsheet. Repeat this step for all of the bond issues.
6. The price for each bond issue in your spreadsheet is reported as a percentage of the bond's par value. (*For example, 104.50 means that the bond issue is trading at 104.5% of its par value*). You can calculate the market value of each bond issue by multiplying the amount outstanding by (price: 100). Do so for each issue and then calculate the total of all the bond issues. This is the market value of Coca-Cola's debt. Comment.
7. Compute the weights for Coca-Cola's equity and debt, based on the market values computed in steps 2 and 6.
8. Calculate Coca-Cola's net debt by subtracting its cash (collected in step 2) from its debt. Recalculate the weights for the WACC using the market value of equity, (market value) net debt, and enterprise value. Compare the results.
9. Get the Income Statement and the Balance sheet. Place your cursor in the Income Statement or the Balance sheet and right-click. Select "Export to Microsoft Excel" (3-4 years).
10. To compute the (book value) net debt for Coca-Cola, add the long-term debt and the short-term debt and subtract cash and cash equivalents for each year on the balance sheet.
11. Get Coca-Cola's market capitalization at the end of the fiscal year for the last three years.
12. Divide the net debt computed in step 10 for each year by the market capitalization computed in step 11, for each year. Then, compute the average ratio. Compare it to the values found in step 8.
13. Calculate the average corporate tax rate for Coca-Cola over the last three years by dividing "Income Tax Expense" by "Income Before Tax". Use the average corporate tax rate.
14. Compute the WACC rate for Coca-Cola using the weight in step 12, the cost of debt from step 4, and the cost of equity from step 3.

15. Create a timeline in Excel with the free cash flows for the 10 years of the project.
16. Compute the NPV of the new project given the free cash flows you calculated, using the WACC method of valuation. Comment.
17. Determine the NPV using the Adjusted Present Value method, and also using the Flow to Equity method. In both cases assume that Coca-Cola maintains the target leverage ratio you computed before. Comment.
18. Compare the results under the three methods.
19. How good would the project be if it were unlevered? Explain.
20. Suppose the company, after all, plans to use a target ratio of debt-to-equity of 1.00, in which case the operating cash flows of the project would be more modest by 10%. How would you assess the value of the project in this case?
21. Surprisingly, CEO Muhtar Kent announces a diversification strategy with the opening of the Coca-Cola Hotel (consisting of refurbishing an old hotel in Washington D.C.). To keep things simple, assume that the cash flows estimated for this new project would be the same that you estimated for the previous questions. How would you value the project in this case?