

EFB343 Corporate Finance - Group Assignment

Coverage: Topics 2-5

Length: Approximately 2,000 words (1,500 words for Part A; 500 words for Part B; excluding calculations, tables and appendices)

Weighting: 40%

Assignment objectives:

1. To explore and understand the dynamics of corporate valuations used in the Mergers and Acquisitions (M&A hereafter) framework, particularly in relation to information retrieval, the limitations of standard valuation methods and the impact of uncertainty on the valuation process.
2. To understand the decision making process of firms in relation to investment decisions.
3. To reflect on and understand the importance of effective team work and coordination of activities in future studies and professional practice.

Group formation and assignment submission:

Students are to combine in groups of 2-5 students to complete this assignment. All group members must sign on the same group number on Blackboard. Submission of the assignment must be through Blackboard, NOT via email (further instruction will be provided). Students will be required to complete and submit all calculations in an Excel file. The report must be submitted in a PDF file.

The assignment consists of: (1) a group component (Part A), which is to be completed by the group and the grade awarded for Part A will be the same for each group member; and (2) an individual component (Part B), which is done separately by each group members and the grade awarded for Part B will vary depending on the quality of the report submitted by individual students.

*****All assignments will be cross-checked for plagiarism! Please do your work within your group only!*****

Assignment information:

This assessment task is worth 40% of your overall grade for the unit, with marks allocated in accordance with the assignment task outlined below:

- Part A – Target selection and firm valuation (30%)
- Part B – Individual self-reflection (5%)

Please see each part for detailed instructions. You will be required to present your findings/answers in a formal report. An additional 5% is allocated to your writing skills. Please see the criteria sheet for a more detailed explanation of our expectations.

Assignment Task

You work for a prestigious investment bank, Cowen Group (CG), which has been recently commissioned by Google Inc. (now Alphabet Inc.) to investigate a number of potential M&A opportunities.¹ The lead partner has asked you to prepare a report with a detailed summary of your evaluations and recommendations in relation to a potential target firm.

PART A – TARGET SELECTION AND FIRM VALUATION (30%)

Google (now Alphabet Inc.) is seeking to grow through M&As. Your major task is to locate one potential target that would interest Google and make a deal. Towards this end, you and your team are required to investigate all the *listed firms in the U.S.* There is no limitation on the industry in which the potential target firm operates, as long as there are decent synergies that can be created through this M&A and it fits the current and future strategic goal(s) of Google. It's a challenging task, so you and your team should do it step by step accordingly.

Step 1. Analyze Google Inc's strategy, market position and industry overlook. Conduct a full SWOT analysis (Strengths, weaknesses, opportunities and threats) of Google.

Hint: Useful information can be obtained from Google's most recent 10K Annual Report, business news or other reliable sources.

(5 marks)

Step 2. Decide whether Google should make a vertical or horizontal M&A and justify your choice.

(2 marks)

Step 3. Set the M&A search criteria and identify three listed firms that would potentially interest Google. All the selected potential target firms must have at least five years of accounting information necessary for valuation. To check the availability of accounting information, search for the firm's 10K annual reports at the following link:

<https://www.sec.gov/edgar/searchedgar/companysearch.html>

Briefly discuss (and justify) the criteria that you have used to identify the three target firms.

Hint: Some examples of selection criteria are:

- a. Is the firm in alignment with Google's vision, long-term strategy and growth objectives?
- b. What are the potential synergy gains? For example, it could be young firms with a pipe line of innovative projects that may lead to promising products in the future; firms with strong expertise that allow Google to expand its existing expertise in engineering and other functional areas; firms having a presence in a fast-growing industry in which Google wants to enter in; or firms with strong names that can help Google to gain more market power, etc. Here, do some brainstorming!
- c. Does the firm have post-integration potential, i.e., how likely can Google successfully integrate the firm's business, technology, human capital and other resources to produce the synergy gains that Google intends to achieve through the acquisition of the firm?

(10 marks)

¹ For more information on Google's name change to Alphabet, see "Larry Page Changes Google's Name to Alphabet -- Should You Buy?", *Forbes*, 10 August 2015, at <https://www.forbes.com/sites/petercohan/2015/08/10/google-changes-its-name-to-alphabet/#36161fe9560b>.

Step 4. Narrow it down to one particular target. Use the Free Cash Flow Methodology to estimate the value of the target firm and its equity. It shall establish the minimum price of the target firm. Here you need to use the target firm's past five years financial data to forecast the firm's future sales, variable cost, fixed cost, depreciation, working capital and capital expenditure. You then need to work out the WACC (Weighted Average Cost of Capital) which will be used as the discount rate for your free cash flow analysis. Below is a step-by-step guide:

Construct future cash flows:

- Use the average growth rate in sales over the last five years to forecast sales in the next 4 years.
- Variable cost is assumed to grow at the same rate as sales.
- Use the average depreciation over the last five years as the depreciation for the future.
- Use the average fixed cost over the last five years as the fixed cost for the future.
- Use the average sales to working capital ratio over the last five years to work out future level of working capital.
- Use the average capital expenditure over the last five years as the future capital expenditure.
- Make assumptions about the growth rate of future net cash flow after year 4. Justify your assumptions.

Calculate the discount rate (WACC):

- Get the equity beta for the firm from Yahoo Finance; Risk free rate is assumed to be 2% and market risk premium is assumed to be 5%.
- Work out the cost of debt of the firm by checking its interest payment and long-term debt. The information is generally available from the firm's 10K annual reports.
- Use the book value of long-term debt (or total liability) and market value of equity to work out the proportion of debt and equity in your WACC formula.

Calculate the value of the target firm:

- Find the present value of the cash flows for year 1-4 as well as the terminal value to get the value of the firm.

(13 marks)

*** Keep all your formulas as simple as possible - don't go overboard and make them unnecessarily complicated. It makes your assignment difficult to understand which can lead to us not allocating you part marks for your effort, particularly if your answer is incorrect! ***

PART B – INDIVIDUAL SELF-REFLECTION (5%)

Your lead partner commends you on your group effort in preparing the preliminary report for his perusal. As a final task, he has asked each of your group members to reflect on their personal experience working in a group in such a fast-paced and competitive working environment. Specifically, he has asked each of you to address the following two issues (make sure you address both):

1. Reflect on your contribution to the group and the performance of your own task(s).
Hint: You can discuss your contribution to various group processes such as formation of the group, organization of group meetings, allocation of the task(s), formation and enforcement of group policies designed to deal with team problems (e.g., free-riding), and provision of feedback to other group members.

(3 marks)

2. What are the two main lessons you have learned from this team work that you can apply to your future team work at university and/or in professional practice?

(2 marks)

As you prepare your reflection on the above two tasks, make sure to draw on specific examples to clarify your points.

Background for Part B (for your reference only)

This group assignment provides you with the opportunity to develop and practice a host of teamwork skills that are increasingly important in today's professional world — it is a highly desirable graduate attribute that can set you apart from other graduates. Some techniques and practices that you may use to build a well-functioning team are listed below.

At the Beginning:*Set clear individual responsibility and accountability*

- Agree on what needs to be done and by whom; Use individual strengths in allocation of workload.
- Ensure all members have a role to play in working toward the team goal.
- Define individual responsibilities and set deadlines for each team member's task.
- Select a team leader/coordinator who can be in charge of overseeing the process, e.g., make sure individual team members complete their task(s) timely and correctly; process stays on schedule; output meets the quality standards as planned.

Effective communication

- Attendance requirements, quality of work, etc.
- Determine consequences for non-adherence to rules

Build consensus

- Encourage participation from everyone
- Implement participatory decision-making structures

Clarity

- Ensure all decisions are clear and agreed by all team members
- Clear deadlines, quality of work and protocols

During the Process:*Keep good records*

- Summarise discussions within meetings and share minutes with team
- Ensure all team members agree to decisions as recorded

Stick to the plan and monitor progress

- Follow through on plan
- Discuss progress or other issues regularly