

Debt vs equity financing assignment



**ASSIGN
BUSTER**

Midterm Project FIN 4873 Debt vs. Equity Financing Your consulting team has been hired to evaluate the financing of a new project. The company wants to fund the project with either debt by borrowing the money or equity by selling additional common stock. The company does not want a combination of debt and equity financing, nor do they want any exotic financing such as convertibles, debentures, warrants or bonds. It's simply debt versus equity. The company's CFO (me) and Board of Directors (rest of class) will listen to your presentation and ask you questions concerning your recommendation.

By the way, you are the consultant, so do not recommend hiring another consultant. Assumptions and Considerations:

- Company: Each team will pick a company from the list posted on Blackboard.
- The type of project will depend on the company you select so the project has to "make sense" in relation with the company's current business plan
- To determine the company's current mission and financials, you will need to download information from the SEC's Edgar site: [www. sec. gov](http://www.sec.gov), or other sources.

Information and links can also be found at Yahoo. com. You will need:

- The latest 10-K (annual report) provides the general business plan and detailed financial data such as depreciation schedules and debt profile.
- The latest 10-Q (quarterly report) for updated financial information.
- The most recent 14Def (proxy statement). This information may be included in some 10-Ks for smaller companies and lists ownership, which could be a factor in the decision. Is the company controlled by insiders or do institutions own a majority of shares? The latest stock price to determine cost per share.
- The latest ratio and growth analysis from on-line financial reporting services for the company and the industry. RMA's Annual Statement Studies (in the UTSA

library) has a large number of industry average financial ratios. Reuters www.reuters.com also has a listing of company vs. industry ratios. • The new project can range between 20 percent of the company's total assets to 35 percent, depending on the ability of the company to grow at the level of new assets selected. If the team decides on debt to fund the project, then funding for a loan will be for 5 years and a debt rate computed at: Prime Rate plus project risk % (probably in the 1-4% range). There should be a reasonable test of the loan in relationship to the rate that the company currently pays. This usually can be found in the 10-K. If the team decides to issue new stock to fund the project, then costs of issuing new stock such as the investment banker's fee as well as possible dilution, or discounting, of the stock price must be considered (probably in the range of 5-10%). The team will create pro forma operating cash flows for the project that will forecast financial models for debt and equity for 3-5 years, or more, if needed. Balance Sheets for the initial year (time 0) only should reflect current structure, proposed structure under debt scenario and proposed structure under equity scenario. Recommended Steps: • Step 1: Make a Base Case projection of the company's proforma financial results assuming that it just conducts business as usual for your 3-5 year time horizon. Step 2: Make a Project Case projection of the company's proforma financial results assuming that it undertakes the project that you are considering. • Step 3: Next, you will need to determine the current capital structure and calculate the WACC under the current structure using the book value of the company's debt and market value of equity. For the equity required rate of return, use CAPM or the Gordon Dividend Growth Model, if applicable, depending on the

beta and/or the dividends issued. • Step 4: Determine the cash flows for the project to calculate IRR, NPV under current WACC capital structure.

If the project is longer than five years, then the terminal fifth year should include sale or salvage of the project. If the project is a going concern, the recommended terminal value is the final year's Free Cash Flow divided by the current WACC minus the growth rate. The easiest way to determine free cash flows is to take the difference in cash flows from the Base Case scenario and that of the Project Case, as we will do in the classroom. • Step 5:

Assuming that the decision has been made to fund the project, then you will want to build in the financing under the debt vs. equity scenarios (one model for each). • Step 6: You will now want to consider the impact of each form of financing on the firm. How does the form of financing impact the company's debt ratios, EPS, ROE, etc.? You will also want to check the reasonableness of your projections: for example, using the DuPont Identity ($\text{Net Profit Margin} \times \text{Total Asset Turnover} \times \text{Equity Multiplier} = \text{ROE}$) on the historic company statements and the proforma statements. This test should show if the project projections are within reason. For example, if the TA Turnover of the historic data is 1. times, meaning \$1 in sales for every \$1 in assets, and the proforma cash flows' TA Turnover is 4.0 times, meaning \$4 in sales for every \$1 in assets, then there is probably an unreasonable assumption that has been made unless new factors can satisfactorily explain the difference. Other considerations: • Charts and graphs will be helpful to explain the decision. • Your team needs a written report of at least three pages, but whatever is necessary to adequately convey the reasoning behind your recommendation. The bulk of your data should be contained in exhibits at

the end of your report. This means scenarios under debt and equity, balance sheets, etc. Also all work papers such as separate calculations for such items as depreciation allotments and schedules, WACCs, NPVs. Depreciation assignments means, for example, how much of the project is going to various asset classes, such as machines, equipment, building and land. • The written report with ALL work papers must be turned in at the beginning of the presentation. The presentation will be in Power Point format, copies of which must be in the appendix. • The oral presentation will include a brief description of the company, the project, the financial data, the interpretation and the recommendation. It is not necessary to show all financial data, but only the data relevant to the presentation. • Generally, Power Point slides should not be more than four short bullet items or tables of four rows by four columns. More than usually results in very small print that is difficult to read. There will be three teams scheduled for presentation each class (selected using a random number generator). The presentation should not take longer than fifteen minutes, and each team member must participate by explaining a portion of the presentation. • Five to ten minutes will be allowed for questions. All team members must be ready to explain and defend any calculation in the presentation. For example, I may ask a team member to explain how the WACC was calculated, and the explanation would be step by step of the formula and its components. A team member's contribution toward the project will be reflected on the Peer Evaluation that will be filled out by each team member. The Peer Evaluation form is posted on my website and Blackboard. Each team member should fill-out the evaluation form and give/e-mail it to me as soon after the presentation as possible. Part of your course grade is based on the average score of the peer evaluations

from each team. Anyone who does not turn in a peer evaluation will have their average calculated assuming that they gave themselves a zero.