Quiz Nº4
Finance I

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Name:

1. How does operational leverage impact the shareholders risk? Explain your answer (10 pts)

As operational leverage increases, shareholders' risk also increases, due to the wider range of possible outcomes.

2. In a world without taxes, how does financial leverage impact the assets risk? Explain your answer (10 pts)

It doesn't. As financial leverage increases, assets' risk DO NOT change, as operational outcomes, or results to "owners of cash flow" DO NOT change.

3. In a world without taxes, if a company has an asset beta of 1.2 and a debt to equity ratio of 1/3, please determine the equity cost of opportunity (Re). Assume the debt is risk free. The risk free rate is 5 %, the market return is 12%. ? (15 pts) $R_a= R_d*D/V+ R_e*E/V = R_f+ B*(R_m-R_f)$

Re=16.2%

4. Suppose you are a Board Director in a company that is deciding the optimal level of debt. Assuming the interest rate demanded by the banks is lower than the expected return of the company's projects, please explain 3 issues/topics related to the readings that should be considered when determining the optimal level of debt. (20 pts)

Additional risk taken by the shareholder

Bankruptcy costs

Incentives-Agency Problems

Market imperfections

5. Suppose you are a Board Director in a company that is deciding the appropriate cost of opportunity for a new project. The project has the same level of risk as the company, but will be financed 99% by a loan with an interest rate lower than the expected return of the project. Please determine if you would:

- Approve the use of the same cost of opportunity as the company's. Explain your reasoning (15 pts). **Depends on whether there are taxes or not. If there aren't taxes, it would be correct, although it would need to be checked with the shareholders, as their risk would increase. If there are taxes, it shouldn't, as the WACC would be different**

- Approve the project, considering that using the same cost of opportunity as the company's results in a positive net present value. Explain your reasoning (10 pts) **Same logic as above. Even though it might be correct to use the same cost of opportunity, it would never be correct to use the same cost of opportunity of the equity (Ke or Re), therefore the project might not be approved as the risk is higher for the shareholders.**