

Exercises

Exercise 1

You are working for a financial consulting firm, and your task is to calculate the tax shield savings for a company that is planning to take on new debt. The company is currently evaluating the option of issuing \$100 million in debt at an interest rate of 5% per year. The company's tax rate is 30%.

What is the tax shield?

Exercise 2

Ford Motor Company is one of the largest and most established automakers in the world. Known for its innovation in the automotive industry. As a financial analyst, your task is to estimate the value of Ford using 2 valuation methods: Market Comparable Valuation and Multiple Valuation.

Based on the financial statements of 2023, here are the key numbers for Ford:

Revenue (2023): \$160 billion

EBITDA (2023): \$13 billion

Net Income (2023): \$5 billion

Debt: \$20 billion

Cash: \$15 billion

The following table shows a list of potential companies and respective multiples to compare with Ford:

Company	P/E Ratio	EV/EBITDA
General Motors (GM)	7	5
Stellantis (STLA)	6	4,5
FlixBus	10	6
BMW	8	6
Boeing	20	10
Grupo Volkswagen	7	4.5
Ferrari	28	15

Industry Average Multiple

P/E Ratio	8
EV/EBITDA	7

Question 2.1: Which companies should you choose as comparable to Ford and why?

Question 2.2: What is the market valuation of Ford based on the market comparable valuation of EV/EBITDA?

Question 2.3: Estimate the valuation based on the multiple valuation of EV/EBITDA Ratio

Question 2.4: Is there a problem that the previous valuation got different results?