





### **Exercise 1**

As a result of its financial planning, a company estimates negative FCFE but positive FCFF for the next year. Which of the following ideas turns not to increase the FCFE for that specific year?

- A. Enter in a leasing contract instead of buying in February a new machine (terms of payment: 2 months) as planned increase ffcf
- B. Ask for factoring increase
- C. Ask for a loan and invest the whole sum buying government bonds correct
- D. Ask for a new line of credit decrease we don't have information, we put it in our account! but we don't know we use them we have financial cost



### **Exercise 2**

Company XYZ Ltd would like to improve FCFE and at the same time protect against some account payables bearing a risk of insolvency. Which solution do you suggest to the company? Assume everything not stated to be constant.

- A. Ask for a financial leasing increase of capex | fin expense increase |
- B. Ask for a factoring with recourse
- C. Ask for a factoring without recourse
- D. None of the previous answers

### **Exercise 3**

Institutional investors during the pitch pointed out that Cashme has some problems in managing the liquidity. The answer of the CEO and the CFO was mainly related to the fact that they were wrong, as CAPEX are null and receivables, payables and inventories days are stable over years.

However, the bond is at maturity and it has to be repaid in full to bondholders.

#### Which of the following could be a proper answer to investors?

- A. "The FCFFs of the company will be negative for the year, but thanks to the internalization plan we will suddenly solve the situation".
- B. "The FCFEs of the company will be negative for the year, but thanks to the internalization plan we will do investments in fixed assets and suddenly solve the situation".
- C. The FCFFs of the company will be negative for the year, but we are going to issue a new bond to replace the current one".
- D. None of the above answers is correct

Recharger Ltd is a not listed company that produces batteries for cars and other vehicles. Some data concerning the company are listed in the followings (as of December 31st, 2021):

- Revenues: 150 M€

- EBIT: 26 M€

- Cash and cash equivalents: 3.10 M€

- Net Profit Margin: 8%

- Income tax rate: 40%

- D/E ratio (computed considering only Financial Liabilities): 0.6
- Total Assets: 174 M€
- Non-financial liabilities = 0

Recently, the shareholders of the company asked an equity advisor to estimate the total market value of their shares (i.e., the potential "market capitalization"). The value communicated by the advisor was 120 M€.

Based on the available information, what is the Enterprise Value of the company?

- A. 185.25 M€
- B. 225.65 M€
- C. 182.15 M€
- D. None of the others

# **Solution**

	Correct	NFP = Equity -	NFP = Fin Liab
		Cash	
E (Equity)	108.75		
D	65.25		
Net Financial Position (= D (Fin Liab) – Cash and	62.15	105.65	65.25
cash equivalents)			
EV	182.15	225.65	185.25

Company B produces sports equipment. You know the following data taken from the Financial Statements of Company B:

Company B data [k€] on December 31st, 2019:

• EBT: 40,000 k€

• Taxes: 15,000 k€

• D&A: 22,000 k€

• Payables: 25,000 k€

• Receivables: 30,000 k€

• Inventories: 50,000 k€

• Financial Revenues: 1,500 k€

• Financial Expenses: 1,000 k€

• Debt: 10,000 k€

• Net Profit: 25,000 k€

Company B data [k€] on December 31st, 2018:

• EBT: 35,000 k€

• Taxes: 13,125 k€

• D&A: 18,000 k€

• Payables: 20,000 k€

• Receivables: 35,000 k€

• Inventories: 55,000 k€

• Financial Revenues: 1,500 k€

• Financial Expenses: 1,000 k€

• Debt: 10,000 k€

• Net Profit: 21,875 k€

On top of the above data, you also know that:

- The company has not invested in new assets in 2018 and 2019;
- Payout Ratio (2019) = 30%;
- No share capital changes have been registered in the last 2 years.

Moreover, some estimates have been done:

- •WACC = 3% and ke = 8%. They are expected to remain stable in the following years;
- •FCFF and FCFE computed for 2019 are expected to remain stable in the next years. Hence, taking 2019 as year 0, assumptions are reasonable for the next 2 years (2020 and 2021);

Considering the available data, calculate the TV at year 2021 that is needed to estimate the EQUITY VALUE with DCF under the hypothesis of perpetuity with no growth.

The first step consists in calculating the FCFF and FCFE at the end of 2019. To do so, some preliminary steps are needed:

- Tax rate = Taxes / EBT = 37.5%
- EBIT = EBT financial revenues + financial expenses = 39,500 k€
- Taxes on EBIT = 37.5% \* 39,500 k€ = 14,812.5 k€
- Dividends of 2019 = Payout ratio 2019 \* Net Profit 2018 = 6,563 k $\in$
- •Delta NWC = (receivables 2019 receivables 2018) (payables 2019-payables 2018) + (inventories 2019 inventories 2018) = (30,000 35,000) (25,000 20,000) + (50,000 55,000) = -15,000 k€

FCFE can be calculated as:

**EBIT 39,500 k€** 

Taxes on EBIT - 14,812.5 k€

D&A + 22,000 k€

Delta Capex - 0 k€

Delta NWC - (- 15,000) k€

FCFF 61,687.5 k€

Financial expenses (net of taxes) - 1,000 \* (1-0,375) = 625 k€

Financial interests (net of taxes) + 1,500 \* (1-0,375) = 937.5 k€

Delta debt + 10,000 - 10,000 = 0 k€

Dividends paid - 6,563 k€

No delta share capital 0 k€

FCFE 55,437.5 k€

FCFE at the end of the year 2021 = FCFE at the end of 2019

Ke = 8%

TV at year 2 = 55,437.5 k € / 0.08 = 692,969 k €