

Examen Capital Investment Policy

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After about ¾ of the classes of this course the professor suddenly left, because of this we didn't see all we had to see (up to page 37 of the second book of Nancy Huyghebaert) Therefore this exam might not be representative of the one the following years seeing less subject matter was seen.

Question 1: The NPV of a replacement investment (6pt)

Current project: $I_0 = 40.000$, with a duration of 5 years was initiated 4 years ago. The estimated residual value at the time of initiation was 5000 and still is correct today. The current market value of the assets is 9000.

A new investment has a I_0 of 6000 and has a duration of 2 years, after which the assets will have an residual value of 2000. The project will make 2500 from sales.

What is the NPV of the replacement investment?

Tax = 40% and WACC = 10%

[Analogue to exercise 19 chapter 1](#)

	Y0	Y1	Y2
I_0 new project	-6000		
Rev sales after tax		1500 (2500 * (1 - 0.4))	1500
Tax shield from depr		1200 (3000 * 0.4)	1200
Forgone tax shield depr		-3200 (8000 * 0.4)	
Sale of existing project	8600 (8000 + (9000 - 8000) * 0.4)		
Residual value existing project		-3200 (-5000 * (1 - 0.4))	
Residual value			1200 (2000 * (1 - 0.4))
FCF	2600	-3500	3900

The NPV = 2641

Question 2: Expenses versus investments in EVA analysis (6pt)

analogue to exercise 6 chapter 3

Calculate the NPV, the EVA of all periods and the MVA

Calculate the NPV, the EVA and the MVA if it is assumed that the annual costs are R&D expenses, and those made in the first year will be depreciated fully at $t=2$ and the expenses of the second year will be fully depreciated at $t = 3$

Question 3: The bootstrap game (6pt)

analogue to exercise 6 chapter 4

Suppose that Tricks is going to take over Magic by exchanging 90 shares of Tricks for 100 shares of Magic. We can assume this acquisition will produce no economic benefits.

	Magic	Tricks
Number of shares	100.000	100.000
EPS	\$4.00	\$4.00
Stock Price	\$60	\$80
P/E	15	20
Total earnings	\$400.000	\$400.000
MV equity	\$6.000.000	\$8.000.000

Calculate the number of shares outstanding, the EPS, the stock price, the P/E ratio, the total earnings, and the MV of equity of the combined company. Show your calculations. Also, explain the consequences of this acquisition for the wealth of the shareholders in Magic and in Tricks

Question 4: Theory of MNE (2pt)

A MNE has more risk compared to an one-country local because of foreign exchange rate, policy's, (and some other reasons), this makes it that the local has an advantage over the MNE

Is this statement true or false, and explain in 5 lines maximum.