

ISEG-Lisbon School of Economics & Management
Universidade de Lisboa
Master in Finance
Mergers, Acquisitions and Corporate Restructuring 2017/2018
04 July 2018
Exam

Duration: 1:00 hour + 15 minutes tolerance

Name: _____ N.º: _____

Class: _____

Read the following instructions before starting the exam:

- Please answer to the questions in a sequential manner. If you do not know the answer to a question, leave enough blank space so you may readdress the question later on.
- Read the problem and the questions. Before starting to solve a question, reflect on the necessary iteration sequence to solve it and on the presentation of the results on each step of your answer, so that your logic can be considered. While rushing you may commit a calculation error, but if you present the calculation sequence and the results throughout each step, the professor may still assess your knowledge and you may still obtain a good mark on that particular question. If only the final results are presented, and you do a mistake on a calculation, the entire exercise will be considered wrong and you will not have a score.
- Do not forget to write all of the assumptions that you feel the need to use. If you do not do so, in some situations it may not be understood if you really know the answer or if you have randomly got the answer correctly, hence a discount will be applied.
- Do not stop on a problem if you do not know how to solve it immediately or if you experience some difficulties. Leave enough space in blank and return to the question at the end of the exam if you still have enough time.
- The total value of each question provides you an idea of the relative time that you should deploy onto each question.
- The exam does not have consultation.
- It is not allowed any conversation between colleagues or calculator exchanges.

Part I. (4.0 points)

Answer to the following questions in a concise and objective way.

1. According to Donald DePamphilis an acquisition process comprehends several major steps. Describe and detail what are those main steps. You may exemplify your answer to a decision of acquisition of a bank (the target) by another bank (the acquirer). **(4.0 points)**

Answer: Page 135 of the book, Mergers Acquisitions and other Restructuring Activities, DePamphilis, Donald, 9th edition (2018)

Part II. (5.0 points)

2. Admit that you were hired by Pharma Group, an international group operating in the production of pharmaceutical medicines, to perform a Due Diligence on a target company, a medium-size pharmaceutical laboratory located in the north of Portugal, Porto region. The target company has about 300 million euros of sales per year and about 700 employees. It has a good track record of development of some innovative medicines.
 - a) Provide a definition of Due Diligence. Is this a relevant component of an M&A process? Why? **(2.5 points)**

Answer: Slides of classes page 5

- b) What are the areas of analysis that you would focus in special your work when conducting the Due Diligence of the target company? **(2.5 points)**

Answer: Slides of classes pages 6 and 7

Part III. (5.5 points)

TEKALL is a company that operates in the sector of electronic security. Among other, it produces drones for surveillance for armed forces and police.

Assuming that:

- i) company's beta is 1.2
- ii) Treasury Bonds for 10 years of maturity: 2.0%
- iii) Euribor is 1,5%
- iv) the spread for the interest rate on loans is 2.5%
- v) tax rate is 21% plus 1.5% of municipal tax
- vi) expected growth rate for the company in perpetuity is 0.25% (real growth)
- vii) inflation rate 1.5%.
- viii) market risk premium 6.0%
- ix) At 31 December 2017:
 - a. Total financial debt 700,000€.
 - b. Operational liabilities (such as suppliers payable accounts and state taxes): 200,000€
 - c. Equity: 300,000€
 - d. Total assets: 1,200,000€
 - e. Fixed assets: 400,000€
 - f. Return on equity: 12%
- x) The company is not listed, and it is not expected to be in the next future.

1. With this information indicate an estimate for the WACC at the present date (July 2018). **(2.5 points)**
2. Do the weights should reflect the firm’s actual or target debt-to-total capital ratio? Justify your answer **(1.5 points)**

Answer: Page 243 and 244 of the book, Mergers Acquisitions and other Restructuring Activities, DePamphilis, Donald, 9th edition (2018)

3. Provide a definition of the concept of Market Risk Premium. What factors may influence the Market Risk Premium? **(1.5 points)**

Answer: Page 238 and 239 of the book, Mergers Acquisitions and other Restructuring Activities, DePamphilis, Donald, 9th edition (2018)

Part III. (5.5 points)

1. You have been asked to value Lisbon Sport, a manufacturer of sport equipment. The company has estimated its free cash flows to equity and its cost of equity for the next 4 years:

Year	1	2	3	4
EPS	1.50	1.80	2.16	2.59
FCFE per share	-2.00	-1.20	0.34	0.09
Net Cap Ex (*) per share	3.50	3.00	1.82	2.50

Note: (*) Net capital expenditures are the difference between capital expenditures and depreciation.

The earnings per share are expected to grow 6% a year after year 4, and net capital expenditures are expected to decline 50% after year 4.

Lisbon Sport currently has a beta of 1.5 and no debt or working capital needs but expects its beta to drop to 1 after year 4.

The debt ratio will remain at 0%. The Treasury bond rate is 7%.

The market risk premium is 5.5%.

- a. Estimate the EPS, Net Cap Ex and FCFE for terminal year. **(1.5 points)**
- b. Estimate the terminal value of equity per share. **(2.0 points)**
- c. Estimate the value per share today. **(2.0 points)**

Answer:

Year	1	2	3	4	a) Terminal Year
EPS	1.50	1.80	2.16	2.59	2.75
FCFE (per share)	-2.00	-1.20	0.34	0.09	1.50
Net Cap Ex (per share)	3.50	3.00	1.82	2.50	1.25
b) Terminal Value of Equity = $1.50 / (.125 - .06) =$					23.01
Cost of Equity = $7\% + 1(5.5\%) =$					12.50%
c) Value per Share today					
	1	2	3	4	
FCFE	-2.00	-1.20	0.34	0.09	
Terminal Value				23.01	
PV at 15.25%	-1.74	-0.90	0.22	13.09	! Discount at the current cost of equity
Value of the Stock =		10.67			
Cost of Equity	15.25%				