

University of Lisbon

ISEG



GESTÃO FINANCEIRA II

Problem Set 1

Licenciatura – Undergraduate Course

1st Semester, 2015-2016

GESTÃO FINANCEIRA II

PROBLEM SET I

SUBMISSION DEADLINE: 13.00 H, 14TH October, 2015

1 – The executive board of a company is hired by and works on behalf of the company's shareholders. Usually, the managers of big companies are smart and become powerful business leaders. Not surprising, they have their own business views (after all that is one of the reasons why they were hired by the shareholders!) and personal interests. Anyway, shareholders expect their decisions to be in the shareholders best interests and the managers not to put their own interests upfront. However, this is not always what happens.

a) Give examples of managers' motivations to pursue their own interests, instead of shareholders' interests. Why?

b) What are the strategies available to shareholders to increase the alignment of managers' interests with the shareholders' interests?

c) Should managers attend other stakeholders' interests as a sound strategy to fulfil the shareholders' mandate given to them? Why?

2 – It is expected from shareholders to exert control over the company's managers, at the least through the EGM (equityholders general meeting). However, this is something that not always happens. What could be some of the reasons for this control mechanism not to work properly?

3- On the birth of Paul's child, he put a €500 deposit in a South Bank account that cannot be accessed until he reaches 18 years of age. Assume that the growth rate on the fund is 3%, how much will his child have at the age of 18?

4- XPTO is a listed company in Euronext Lisbon. The company has a zero coupon bond that will pay €5.000 in 10 years. This bond is selling today at €2.125. What is the continuously compounded annual interest rate on the bond?

5- Monsieur Mitterrand has just sold his restaurant to purchase a hotel with the proceeds. The hotel is on the French Riviera, between Nice and Monte Carlo. The cost of the hotel to Monsieur Mitterrand is €350.000 and the seller requires a 30 per cent up-front payment. Monsieur Mitterrand will pay the up-front amount with the proceeds of the restaurant sale. However, he will take out a mortgage to pay the remaining amount. Monsieur Mitterrand has been able to arrange one with Crédit Mutuel that charges a 12 per cent APR. Monsieur

Mitterrand will make equal monthly payments over the next 10 years. His first payment will be due one month from now. There were no other transaction costs or finance charges.

- a. How much will Monsieur Mitterrand pay per month?
 - b. Consider that Monsieur Mitterrand cannot afford a monthly payment higher than €3,500. In this case, the bank will get €3,500 a month, during the whole period of the mortgage, but will demand a terminal balloon payment (payment of the debt that will remain unpaid at the last moment in the life of the mortgage). How much will Monsieur Mitterrand's balloon payment be?
- 6- At lunch a friend told you that she watched a documentary according to which, if you have a positive thinking and believe something you desire will happen, it will actually happen. Consequently, you decided to have two million pounds by the time of retirement, at age 67. You have just turned 21 and decided to invest in the stock market. Your great but not so fashionable corporate finance textbook leads you to have an educated guess that you can make 15% per annum.
- a. Assuming that you are prepared to save and invest a fixed amount of money every year, in order to fulfill your dream, how much do you need to invest each year?
 - b. After all, you decided to follow a buy and hold strategy and invest an initial amount today and leave it until retirement. How much should you invest today?
- 7- A friend told you about an investment opportunity that will pay you \$2,200 every 3 years. Your cost of opportunity is 5 per cent per year. How much worth today this investment opportunity?