ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Principles of Finance

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Assignment 5

Instructions

- Assignments should be done in groups of 3 students.
- You should remain with the same group through the entire course.
- Submit on Moodle only one copy of solutions per group.
- For each assignment you can get a maximum of 100 points.
- All assignments turned in late will not be graded (zero points).

Due date

The due date is indicated on Moodle.

This assignment is based on the Harvard Business School Brief Case Nr 9-209-059 "Tottenham Hotspur plc".

In order to answer the questions below, you will first need to read the case. All the data you need to solve the case are provided in the Exhibits (See the Excel spreadsheet). For this assignment you should hand in two files. First, a separate file (pdf) where you record all your results (tables, graphs, etc) and comments. Second, you should also hand in an Excel spreadsheet with all your calculations. The Excel file is only needed in case we do not understand something you did. The instructions are very precise on what you should do, what results to report, and what questions to answer.

As of early 2008, Daniel Levy, chairman of the Tottenham Hotspurs FC, faces a complex investment problem. Your assignment is to perform a DCF analysis in order to help Mr Levy to make a decision.

For all questions below, you need to calculate changes in working capital. Use Exhibit 4 to calculate working capital in 2007, and then make the assumption that working capital needs to increase in proportion with revenue when analyzing the building of a new stadium or the purchase of the player. In addition, use a discount rate of 10.25% and assume you are performing the below tasks at EoP 2007.

1. Assume Tottenham Hotspurs FC continues in its current stadium following its current player strategy.

   (a) Perform a DCF analysis using the data given in the case. You need to construct your own free cash flow estimates from the data given in Exhibits 4 and 5 of the case. What is the enterprise value of Tottenham Hotspurs FC?

   (b) Using your previous result in (a), compute the value of equity of the club and the price per share. What can you say about the current valuation of Tottenham Hotspurs FC of £13.80 per share?

   Hint: Remember that the Market value of equity = Enterprise value – Debt + Cash.

2. Using the DCF approach, evaluate the decision to build the new stadium only. Is this a positive NPV project?

3. Using the DCF approach, evaluate the decision to sign a new striker only. Is this a positive NPV project?

   Note that the past 10 years of Premiership revenue and point total data suggest that for every 1% increase in a team's point total, a team could anticipate a 1.52% improvement in revenues. To calculate the total increase in revenues from the purchase of a new striker, you will have to establish a relationship between total points and increase in net goals.

   Hint: Use the information in Exhibit 2. If you do not know how to proceed here, assume that each additional net goal increases the average total points by 0.7?.

4. Using the DCF approach, evaluate the decision to build a new stadium and to simultaneously sign a new striker. Is this a positive NPV project? Compare your answer to your results in 2) and 3) above. What explains the differences?