

SII MASTERS JUNE 2008 EXAMINATION

FINANCIAL MARKETS

DATE OF EXAM	Friday 27 June 2008
3 HOURS	2.00 pm – 5.00 pm
RUBRIC	SECTION A – answer FOUR questions in this section SECTION B – answer BOTH questions in this section SECTION C – answer ALL parts of the question in this section

Candidates are reminded that no marks will be awarded for illegible work

NOTES TO CANDIDATES

1. Please insert your Candidate Number on the Answer Book cover. *Do not insert your name.*
2. Show *all* workings in your Answer Book.
3. Candidates may attempt the sections in any order. Please indicate clearly in your Answer Book which questions you are answering.
4. Please insert in the box provided on the cover of your Answer Book the numbers of the questions you have attempted in the order in which they appear in the Answer Book.
5. You may use the calculator provided or one approved by the Securities & Investment Institute.
6. You must hand your Answer Book to an invigilator before you leave the Examination Hall. *Failure to do so will result in disqualification.*
7. The decision of the panel is final and no correspondence will be entered into concerning the grade awarded.
8. Once submitted, the examination scripts become the property of the Securities & Investment Institute and will not be returned to candidates.

SECTION A**TOTAL 20 MARKS**

Answer ANY FOUR questions in this section. Each question carries 5 marks

- 1 Define Capital and Money Markets and list any two financial instruments in those two markets. *(5 marks)*
- 2 Define duration. If the coupon rate on a bond decreases, what will be the effect on its duration? *(5 marks)*
- 3 What is the motivation for a long straddle and what are the attributes of the position? *(5 marks)*
- 4 Why are long term currency swaps NOT generally used for speculative purposes? *(5 marks)*
- 5 Define the four types of commercial property. What is the pattern of commercial property prices relative to equities in general? *(5 marks)*
- 6 Define C and S shares and discuss how you can distinguish them. *(5 marks)*

SECTION B**TOTAL 40 MARKS**

Answer BOTH questions in this section

- 7 Kjell Martin has just started working as a financial analyst at an investment bank. Her job is to value stocks. She is asked to use a risk free rate of 5% and an expected market return of 12% for the UK. Using these measures Kjell has valued a newly launched company NEWY PLC, whose beta is 1.5 and whose market price is £40 per share and calculated an intrinsic value of £53 per share for the company. Now, she has to value a more mature company OLDY PLC, a company that has a beta of 1 and a current market price of £35 She came to see you to ask you the following questions:
 - a) What is the required rate of return she should use for OLDY PLC? *(5 marks)*
 - b) She has estimated the growth rates in dividends for OLDY PLC of 5% per year in the years thereafter. OLDY PLC has paid a dividend of £1 last year. Estimate the intrinsic value of OLDY PLC. *(10 marks)*
 - c) Based on these results and the data given above, should she recommend OLDY PLC or NEWY PLC for purchase? Why? *(5 marks)*

- 8 George Smith is an advisor for a private client. His client is planning to invest some money in the stock market by investing in an index fund. His client has the following scenarios in mind with respective probabilities and expected returns for next year:

State of Economy	Scenario	Probability	Expected Return
Boom	1	0.25	44%
Normal Growth	2	0.50	14%
Recession	3	0.25	-16%

- a) The client wants George to help him with expected returns and their dispersion for this index fund so that he can make up his mind about investing in it or not. Calculate the mean expected return and standard deviation of returns on this index fund. *(5 marks)*
- b) A week later the client comes to George and says “Well I think the probability of Boom has increased now with this newly elected government and is 30% but so did the probability of recession which I think is also 30%. The probability of normal growth is I think 40% now.” How do the mean expected return and standard deviation of returns change? *(5 marks)*
- c) Has the investment that George’s client has been considering become more or less risky? Explain why. *(5 marks)*
- d) If the client is risk averse, would he prefer the index fund before or after the change in government as in b) above? Explain your reasoning. *(5 marks)*

Answer ALL parts of the question in this section.

- 9 You are the manager of a small optical cable firm. Your main line of business is providing internet services. Your company is based in Reading, in the UK. Your boss invites you to a meeting to discuss as she is considering expanding the business.

She thinks that there is great scope for expanding the business in various cities in the UK. However, she is also sceptical about the uncertainty with reference to a worldwide recession and slowdown in this line of business.

Her former boss has told her: “You can buy an option to buy connection time from BT in two years time, rather than laying your own cable.” She is considering the idea but she has three main concerns. She shares them with you and ask three questions that need to be answered so that she can make a decision.

“First, the volatility in this business is high. The standard deviation of our revenues is about five times higher than any other business in the UK. So, in this context, is it a good idea to buy an option rather than laying the cables?”

“Second, I am also worried that two years is a long time in this business. Would it not be better to buy an option for about six months only?”

“And thirdly, considering that interest rates are increasing in the UK and I expect them to increase further, is it a good idea to buy an option rather than laying the cables ourselves?”

She wants you to prepare a report that includes a clarification of the concerns she has and answers her questions. She also wants you to make a suggestion about if she should buy the option from BT or lay the cables herself.

Required:

Give an answer to each of the three questions that your boss asks above. Justify your answers. *(10 marks each, total 30 marks)*

Finally, advise your boss whether she should buy the option from BT or lay the cables herself and discuss the reasons for your recommendations in detail. *(10 marks)*