EXAMINATION

14 April 2008 (pm)

Subject SA5 — Finance Specialist Applications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

1. *Enter all the candidate and examination details as requested on the front of your answer booklet.*

2. *You have 15 minutes at the start of the examination in which to read the questions. You are strongly encouraged to use this time for reading only, but notes may be made. You then have three hours to complete the paper.*

3. *You must not start writing your answers in the booklet until instructed to do so by the supervisor.*

4. *Mark allocations are shown in brackets.*

5. *Attempt both questions, beginning your answer to each question on a separate sheet.*

6. *Candidates should show calculations where this is appropriate.*

AT THE END OF THE EXAMINATION

Hand in BOTH your answer booklet, with any additional sheets firmly attached, and this question paper.

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.

1 ABC Ltd is a large UK based proprietary derivatives company. For the past several years ABC group has bought and sold a wide range of financial derivatives. Head office is in London, England. ABC has two other offices; one in Sydney, Australia and one in Singapore.

(i) Describe the types of financial derivatives that are likely to be the most commonly traded or held by ABC group. [5]

(ii) Describe ABC group's most likely counterparties including reference to the types of derivatives traded and the forums for the trades. [6]

(iii) Discuss likely ways that financial derivatives' counterparties mitigate or otherwise manage each others' credit risks. [7]

(iv) Suggest reasons why ABC group has established and maintains offices in Singapore and Sydney. [5]

The ABC group is comprised of three companies namely, ABC Ltd, ABC Singapore and ABC Sydney. ABC Ltd wholly owns both ABC Singapore and ABC Sydney.

ABC Ltd's fiscal year end is December 31.

ABC Ltd made a pre-tax loss of £25m in 2006. This was the only year that ABC has made a loss.

At December 31, 2007:

- ABC Ltd's unrealised gains made in 2007 on its derivatives book totalled £45m.
- ABC Ltd's pre-tax profit excluding the unrealised gains was £90m.

During 2007:

- ABC Australia declared a pre-tax profit of £20m. It paid tax at the rate of 33% on the profit. It paid a £10m dividend to ABC Ltd. This dividend was not subject to any withholding tax.

- ABC Singapore declared a pre-tax profit of £15m. It paid tax at the rate of 10% on the profit. It paid a £5m dividend to ABC Ltd. This dividend was subject to a 15% withholding tax.

(v) Calculate, stating your reasons for making the various calculations, ABC Ltd's UK tax owing for fiscal year 2007 based on the above information. [8]

ABC has been recently downgraded by Standard & Poors from AA to AA–. In the light of this downgrade the Chief Executive Officer has launched an initiative to install an enterprise risk management (ERM) framework before the end of the calendar year. It is intended that the ERM framework should include relevant aspects of ABC's FSA regulation requirements and ABC's corporate governance framework.

(vi) Describe the various risk mitigation aspects of each of the FSA's regulation requirements and ABC group's corporate governance framework. [6]

A risk aggregation model is being developed in order to estimate the probability of incurring a loss in excess of given amounts arising from any of the risks facing the business including market risk, credit risk and operational risk.

(vii) Describe, stating your reasons, the main features which should be incorporated into the design of a suitable risk aggregation model for ABC group. [8]

The launch of the new ERM framework is intended to assist ABC to regain its AA rating.

(viii) Describe other ways that it could regain its rating. [5]

[Total 50]

2 You are the Finance Director of a large brokerage firm. The firm's capital consists of short-term senior secured debt of £500m and equity of £200m.

Your firm is considering a £100m acquisition of a local unlisted brokerage firm with no debt on their balance sheet and you have been asked to consider the various financing options available.

(i) Discuss the advantages and disadvantages of using bank finance compared with raising finance in the capital markets. [7]

You have been approached by an investment bank which has suggested taking out mezzanine finance to pay for the acquisition.

(ii) Outline the likely features and structure of the mezzanine finance. [5]

(iii) Comment on the appropriateness of this type of finance for your acquisition. [4]

(iv) Discuss the likely problems your firm may encounter when trying to place a value on the target. [6]

Your firm has a proprietary trading desk that makes the following trade:

- buy and then swap a cash Corporate Bond at par
- the corporate bond's coupon is at LIBOR + 70bps
- finance through Repo at LIBOR
- buy full Credit Default Swap (CDS) Credit protection on the Bond at a cost of 55 basis points per annum

(v) Explain the main features of this trade. [6]

(vi) Describe two possible approaches to determine the risk capital required for this trade. [6]

The counterparty applies a reduction of 4% to the notional value of the corporate bond. The required risk capital for this trade is 1%.

(vii) Calculate the expected return on capital. [3]

(viii) State with reasons whether the trade would profit from the unexpected widening of credit spreads. [2]

The trading desk executes all of their trades with one long term AA rated counterparty.

(ix) (a) Discuss the principles the rating agency would apply when determining a rating for this counterparty.

(b) Explain the main limitations of using this rating from the rating agency.

(c) Describe how these limitations could be mitigated.

[11]
[Total 50]

END OF PAPER