EXAMINATION

26 April 2010 (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 before 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 (i) Describe the features of an Americus Trust. [2]

(ii) Compare and contrast:

holding debt issued by Company A which is backed by a letter of credit issued by a bank; and

holding debt issued by Company A and holding separately a credit default swap from a bank on the debt issued by Company A. [8]

A bank has promoted the following investment transaction to all of its wealthy customers. The customer sells short shares in three listed banks and buys an equivalent value of shares in three listed energy companies. The customer settles both trades after 30 days. The only cash flow occurs at the end of the transaction.

(iii) Describe the main risks associated with this transaction. [6]

(iv) Estimate the expected risk adjusted performance measure for this transaction stating any assumptions for relevant market parameters that you require. [7]

The bank has been criticised for failing to adequately quantify the potential loss from this transaction.

(v) Describe a method that the bank might use to calculate the customer's capital at risk from a given transaction. [4]

(vi) Describe changes which could be made to this transaction to change the capital at risk according to a particular customer's liquid assets without changing the fundamental long-short structure of the transaction. [4]

The bank now promotes the following set of products to all of its customers. The products may offer some of the bank's customers a tax advantage. The bank has produced a list of available corporate bonds. For each available bond the customer is able to enter into one or more of the following transactions:

- Purchase the equivalent of all of the remaining coupon payments to be paid by the bank regardless of whether or not that bond defaults.
- Purchase the equivalent of the principal repayment to be paid by the bank regardless of whether or not that bond defaults.
- Sell credit default swaps to the bank protecting the bank from a fall in the market value of that bond as a result of its default.

The bank is pricing the coupon and principal payments by discounting them at risk free rates. The bank has not yet decided whether to buy the bonds to hedge the products.

(vii) Discuss the likely profitability of these products to the bank. [6]

(viii) (a) Suggest two claim settlement approaches for the credit default swap.

(b) Discuss the most suitable claim settlement approach for this credit default swap. [3]

(ix) Discuss the pricing considerations and methodology that the bank should use when pricing this credit default swap. Your answer should include reference to the attractiveness of these products to the customers and the relevant aspects of the credit default swap market. [11]

The corporate bond based products have not sold as well as anticipated. Customer feedback suggests that the risk free discount rates being used to price the products are too low. The research also suggests that the customers would be happy to accept some of the credit risk in the bonds but do not wish to sell the credit default swaps to enhance their returns.

(x) Describe changes that the bank could make to the products to take account of the customer feedback. Your answer should include the consequences to the bank of making the proposed changes. [6]

[Total 57]

2 A UK newspaper has published an article about the worldwide credit crisis that started in 2007. The newspaper's primary conclusion is that the crisis was caused by poor bank supervision and, as a result, banks were able to increase the amount of leverage on their balance sheets significantly above historical averages. The newspaper asserts that this resulted in the banks having insufficient capital to withstand credit losses. It calculates that UK banks increased their ratio of balance sheet debt to equity from a historical average of 12:1 to 30:1 at the height of the crisis. The newspaper calls on the Financial Services Authority to impose a maximum ratio of debt to equity of 15:1 for all banks with immediate effect.

You work for The Association of Banks, a UK banking industry trade group, and have been asked to develop your association's views on this conclusion and proposal.

(i) (a) State the primary objective of the UK government regarding financial services.

(b) Outline how the government aims to achieve this goal. [5]

(ii) Outline the roles of the Bank of England and the Financial Services Authority and their interaction in UK banking supervision, including at least one strength and one weakness of the UK system of banking supervision. [9]

(iii) Outline the points that you would make to the newspaper's editor explaining the impact on the members of your association of the newspaper's proposal, with specific reference to:

(a) the recent path of interest rates in the UK and major developed markets and their influence on balance sheet leverage

(b) the implications of having to reduce balance sheet leverage with immediate effect

(c) how the impact differs on commercial banks and investment banks

(d) the ongoing effect on future profits of a maximum leverage ratio; and

(e) the proposal's potential effect on competitiveness of the UK in relation to other countries

[24]

(iv) Explain how transparency of financial information can complement regulatory supervision from an investor's perspective. [5]

[Total 43]

END OF PAPER