## **EXAMINATION**

27 April 2009 (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 Fred set up a company with the intention of manufacturing actuarial black boxes, which are sophisticated computing devices. They rely on using cutting-edge technology to process data in the fastest time currently possible. Fred has financed his company so far with bank loans. He now needs to raise additional finance in order to begin manufacturing the boxes.

Fred is considering seeking venture capital to provide this finance.

- (i) Compare and contrast the features of venture capital and bank debt. [14]
- (ii) Describe options available for structuring venture capital. [6]
- (iii) State exit strategies that a venture capital provider may use to realise capital gains on its investment. [4]
- (iv) Describe the factors that the venture capital provider will take into account when appraising the personnel and management of Fred's firm before deciding whether to invest. [4]

The machine Fred needs to manufacture his boxes costs £100,000. He can lease the machine for £22,500 per year for 5 years with the option to cancel the lease after one year.

(v) State with reasons the further information that Fred needs to consider before deciding whether to take the lease. [10]

Fred wishes to establish a dividend setting policy for the company.

- (vi) Describe the factors that would be taken into consideration by Fred and contrast these factors with those relevant to a listed and long established company.
- (vii) (a) Suggest two alternatives to a cash dividend that a long established company may choose.
  - (b) Discuss the share market's perception of each alternative and for each alternative suggest the message that is being conveyed to the share market if the company were to select it. [4]

    [Total 50]

- 2 Cautious Bank plc, a UK wholesale bank, has a small proprietary trading desk. The trading desk undertakes convertible bond arbitrage, merger & acquisition arbitrage and fundamental long-short equity strategies to generate profits for the bank. All three strategies focus on the UK and Japanese markets.
  - (i) Outline the inefficiencies that these three strategies are trying to exploit.
    - (b) Describe a typical trade for each strategy. [6]

One of the trading desk's counterparties is TrustUs Bank plc, a large wholesale bank engaging in a range of off-balance sheet activities, mainly in the form of private label, highly leveraged Collateralised Mortgage Obligations (CMOs).

- (ii) Describe two major techniques used to assess and reduce the credit risk associated with private label CMOs. [2]
- (iii) Outline the costs to shareholders which are typically associated with bankruptcy. [5]

TrustUs Bank runs into financial difficulty and is declared bankrupt. The trading desk has several over-the-counter (OTC) forward contracts, options, credit default swaps and total return swaps in place where TrustUs Bank is the counterparty.

- (iv) Describe the likely losses the trading desk will incur as a result of this bankruptcy. [6]
- (v) Describe the steps the trading desk should take to mitigate the impact of any potential future defaults by their other counterparties. [7]

As a result of declining confidence in the local banking systems the UK and Japanese markets experience a sharp drop in the share prices of various financial institutions. Following this, the Financial Services Authority (FSA) in the UK announces an immediate nationalisation of several local banks. The same day the Japanese regulator, the Japan Financial Services Agency, introduces an immediate ban on short selling of the equity of listed banks and requires all investors to close out any existing short positions in listed banks within the next three business days. The ban on short-selling does not extend to the use of derivative instruments.

- (vi) Outline the likely rationale for each of the actions from the UK and Japanese regulators. [6]
- (vii) Describe the likely impact of these actions on the trading desk. [8]
- (viii) Outline alternative methods by which the trading desk can gain short exposure to financial stocks. [5]
- (ix) Outline other possible steps the UK's FSA and Bank of England can take to improve overall market liquidity and restore confidence in the banking system.

[5]

[Total 50]

### END OF PAPER