EXAMINATION

5 April 2005 (am)

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.

1 A small UK bank consists of two divisions: residential mortgage lending and client advisory. Capital management has traditionally been approximate, with the bank able to call on its parent company for additional funding if needed. However, following a change of ownership of the parent, the bank's directors have now been instructed to apply more robust capital management techniques, and to ensure the bank is sufficiently capitalised using global best practice.

You have been hired by the bank to institute a capital management framework. You are given the following data about the finances of the bank and its divisions:

	Mortgage Lending	*Client Advisory*	*Bank*
Expected annual revenue	£30m	£2m	£32m
Expected annual costs	£20m	£1m	£21m
Expected annual writeoffs / losses	£1m	£0	£1m
Worst historic loss suffered in single year	£1m	£8m	-
Standard deviation of profit	£5.5m	£2m	-
95% Value-at-Risk	£0	£0.5m loss	-

Target return on capital		10% p.a.
Assets	Mortgages receivable	£600m
	UK Treasury bills	£40m
Liabilities	Debentures outstanding	£590m

(i) Describe the characteristics of a framework which the bank could adopt and explain how your approach will deal with:

- capital setting
- capital allocation
- incorporating the requirements of global banking regulators and providers of capital [19]

(ii) State what is meant by "surplus capital" and give reasons why it may be desirable or undesirable to hold surplus capital. [5]

(iii) Calculate (a) the total capital required under current Basel international banking regulations and (b) the capital that should be allocated to each division. State what your calculations imply for the bank's level of capital. [9]

(iv) The client advisory division provides expertise on speculative property developments but has on at least one occasion suffered a large loss resulting from poor advice given, which caused a client to suffer financial damage and for which the bank was subsequently required to make a compensation payment.

(a) Outline the problems that this type of outcome might pose for your capital allocation framework.

(b) Suggest how such outcomes could be incorporated it into the model.

(c) Suggest steps the bank can take to mitigate the risk of such losses.

[9]

(v) The parent company has indicated that the bank cannot expect to receive further funding beyond any current demand and must become self-sufficient. The bank's directors are aware that the mortgage business is growing strongly and do not wish to turn away new business due to capital constraints.

Suggest actions the bank could take to enable it to keep growing its mortgage business. [8]

[Total 50]

2 The sole activity of a large UK property company is to own and manage a portfolio of industrial property located in Europe.

The company's current market capitalisation is approximately £1,000m. The outstanding debt is currently approximately £500m and is comprised of unsecured bank debt and sterling denominated unsecured corporate bond finance. The bonds are currently rated BBB and Baa2 by S&P and Moody's respectively.

The company now wishes to raise £500m by either raising new equity or by securitising some of their existing prime property assets. The proceeds will be used to purchase more industrial properties in Europe. You have been appointed by management to advise them on raising the new capital.

The company has provided you with the following additional information.

- The expected return on equity is 12% p.a.
- The average cost of existing debt is 9% p.a. and the expected cost of new term debt is 6% p.a.
- The company's current equity and corporate bond investor base is made up solely of UK institutional investors.
- It is intended that the bonds issued from the securitisation would be sterling denominated fixed rate bonds rated AAA and Aaa by S&P and Moody's respectively.

Draft a report to the company's board which:

(i) Describes the various steps that the company or its advisers would need to undertake to complete each of the alternative transactions under consideration. [16]

(ii) Highlights any market risks in the transactions, any hedging strategies that the company should consider and the likely effectiveness of these hedges. [10]

(iii) Describes, including making appropriate calculations, the impact of each transaction on the capital structure of the company and proposes an appropriate dividend policy following each transaction. [10]

(iv) Describes the impact of each transaction on the main investors in the company and proposes any actions that the company may need to take as a consequence. [12]

[Plus 2 marks for drafting — Total 50]

END OF PAPER