

EXAMINATION

20 May 2015

Subject F205 — Investments Specialist Applications

Time allowed: Three hours

INSTRUCTIONS TO THE CANDIDATE

- 1. Candidates will be issued with instructions to log-in using a password (which you will be provided with at the exam center).*
- 2. Candidates are required to submit their answers in Word format only using the template provided.*
- 3. Save your work continuously throughout the exam, on your computer's hard drive that you have been provided.*
- 4. 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.*
- 5. You must not start typing your answers until instructed to do so by the invigilator/supervisor.*
- 6. Mark allocations are shown in brackets on exam papers.*
- 7. Attempt all questions, beginning your answer to each question on a new page.*
- 8. Candidates should show calculations where this is appropriate.*

Note: The Actuarial Society of South Africa will not be held responsible for loss of data where candidates have not followed instructions as set out above.

***AT THE END OF THE EXAMINATION
Save your answers on the hard drive.***

<p>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.</p>

QUESTION 1

You are the investment consultant to the Mzansi Mine Workers Pension Fund (MMPF) which is a defined contribution pension fund that serves South African mine workers. The principal officer of the fund has approached you for advice on a proposal he is considering.

ABC Co is a large multinational diversified mining company. ABC Co has decided to close down one of its South African coal mines as it is no longer profitable. A group of employees from the mine (who are members of the MMPF) have approached the trustees with the suggestion that MMPF buy the mine from ABC Co. These workers believe that, under new ownership, the mine could be turned around and jobs saved.

- i) Discuss the issues you would take into account when determining a valuation of the mine. [18]
- ii) Discuss the merits of the employees' proposal. [14]

[Total 32]

QUESTION 2

- i) Outline the economic function of commodity futures. [3]
- ii) Define contango and backwardation in commodity markets and outline the conditions under which each would exist. [5]

Your friend Tom is a hedge fund manager. The price of commodity X has fallen sharply over the last 6 months and Tom is of the view that the price of X is unsustainably low. He would like to position his hedge fund to profit from this view.

In order to do so, he would like to gain exposure to commodity X by going long in 6 month futures contracts and rolling these. He also mentions that the futures curve for commodity X is in contango.

- iii) Comment on the merits and drawbacks of his approach. [4]
- iv) Explain the alternative strategies that Tom could use to profit from his view that the price of commodity X is unsustainably low. [8]

[Total 20]

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QUESTION 3

- i) Outline the composition, characteristics and published index types of the ALBI20 and its sub-indices. [4]

You are the investment consultant to a defined contribution fund. The board of trustees is concerned about the cost of active bond funds included in the default portfolio and propose replacing them with passive funds.

- ii) Discuss the merits of the proposal. [9]

[Total 13]

QUESTION 4

Describe the challenges in constructing a South African corporate bond yield curve. [11]

[Total 11]

QUESTION 5

You are assisting a South African retirement fund in drafting its Investment Policy Document.

The draft policy includes the following statement:

“The Trustees recognise the increasing importance of environmental, social and governance (“ESG”) factors. The Trustees should therefore ensure that adequate steps are taken to include and address ESG factors in the investment process.”

A trustee has responded that, in his opinion, the trustees’ job is to invest the assets to achieve the best investment returns while taking into account the investment risks associated with the various asset classes. He does not believe selecting investments based on ESG criteria, and thereby limiting the investment universe, is in the best interests of members.

- i) Outline your response, including:
- the requirements with respect to ESG principles that are set out in South African retirement fund regulation and investment guidelines; and
 - how adopting ESG principles could benefit the fund and its members. [7]
- ii) Discuss how the portfolio manager of an SA listed equity fund could incorporate ESG considerations into their investment process, and some of the challenges associated with doing so? [17]

[Total 24]

[Grand Total 100]

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