

# EXAMINATION

22 September 2008 (pm)

## Subject SA6 — Investment 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 all three 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** A well established asset manager has traditionally invested on a “long only” basis. The organisation has decided that they should launch a Global Equity Long/Short fund for investors within the next six months to capitalise on the interest of institutional investors for alternative investments.

The Chief Executive Officer has read that so-called “Extended Alpha” or “Relaxed Long-only” funds are proving more popular and suggests that the organisation develops a 130/30 product instead of the Global Equity Long/Short fund.

- (i) (a) Describe the term long/short. [2]
- (b) Explain how this is different from a traditional equity fund.
- (ii) Outline the sources of additional returns and risks a long/short fund has compared with a long-only fund. [3]

In the marketing material the fund is described as a “bottom-up” fund.

- (iii) Define the term “bottom-up”. [1]

The new fund is a “best ideas” fund which will have only 30 stock positions and will have a target return of 6% above the MSCI Global Equity Index with a tracking error expected to be about 12% per annum on average. The expected return of the MSCI Global Equity Index is forecast to be 10% per annum over the next five to ten years.

- (iv) (a) Describe and set out the formula for the term tracking error.
- (b) Calculate the expected return and range of returns the fund could generate if all the assumptions above are correct.
- (c) Comment on the expected return target and suggest other ways it could be achieved. [5]
- (v) Describe the factors that will influence the tracking error of the fund relative to the index. [3]
- (vi) Define and calculate the expected information ratio of the portfolio. [2]
- (vii) Explain what is meant by a 130/30 fund. [2]
- (viii) Outline the reasons why a 130/30 fund would be more popular than the Global Equity Long/Short fund. [8]
- (ix) Outline the difficulties in managing a 130/30 fund. [4]
- (x) List the key considerations in determining the constituents of the short portfolio. [6]
- (xi) Outline the key factors to be taken into account when deciding how the short portfolio should be managed. [2]

The Chief Executive is concerned that the organisation's lack of a track record in managing hedge funds will make investors reluctant to commit to a new 130/30 product.

- (xii) Compare the relative merits of traditional asset managers and hedge fund managers in offering a 130/30 fund. [10]  
[Total 48]

**2** The government of an overseas country wants to increase the number of owner occupied households. In order to achieve this objective the government issues mortgages directly to the people, usually for 100% of the market value of the house. Due to the demographics of the country a large percentage of the mortgages are described as sub-prime debt. The government sells the mortgages to a Special Purpose Vehicle (SPV) and you have been offered the opportunity to invest in the SPV.

- (i) (a) Define the term sub-prime.  
(b) Explain how the default rate, risk and return characteristics of sub-prime debt differ from investment grade debt. [3]
- (ii) Explain what securitisation is and why the government may wish to utilise a SPV to securitise assets. [5]
- (iii) Describe how securitisation is usually structured within a SPV and the characteristics of the tranches offered to investors. [6]

The overseas country enters a period of recession.

- (iv) Describe how the risk characteristics of the tranches within the SPV may change as a result of a recession. [6]  
[Total 20]

**3** You are an investment consultant to pension funds and have been contacted by a trade journalist who has recently started in the pension and investment media. The journalist is writing an article on structured products and how they can improve the pattern of returns achievable. They have approached you to better understand the terminology and the reasons why pension funds should use structured products.

- (i) Explain, by defining and with reference to the traditional asset classes used by pension funds and derivatives, what structured products are. [10]
- (ii) State the features that can be used to classify different types of structured product. [5]
- (iii) State the principal needs of pension funds from their investments. [3]
- (iv) Explain with examples the reasons why pension funds would consider investing in structured products. [14]  
[Total 32]

**END OF PAPER**