Actuarial Society of South Africa

EXAMINATION

13 May 2010 (pm)

Subject F205 – 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 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.
**Question 1**

You are the chief investment officer of a South African life company, SALCo, which has a strategic asset allocation of 5% of its policyholder assets to direct property. The property portfolio is currently worth roughly R3bn. Management of this portfolio is outsourced to a professional management company, TopProp.

The largest holding in the property portfolio is a regional shopping centre aimed at the upper end of the retail market. SALCo was involved in developing this centre 20 years ago together with a listed property loan stock company, ProPLS, and each owns a 50% share in the property. From inception the property has been very successful commercially and financially and subsequent expansions have doubled the original retail letting area. SALCo’s share in the property was recently valued at R750m by an independent valuator.

TopProp has now approached the board of SALCo with a proposal to undertake a major refurbishment of the property. They maintain that the existing finishes and layout are no longer adequate for a high-end centre. Newer and more appealing shopping centres in the vicinity will steadily erode the centre’s appeal unless drastic steps are taken to improve the shoppers’ experience in line with current retail marketing trends.

TopProp have engaged architects on risk and formulated a proposal to spend R500m on a major refurbishment that will include the upgrading of finishes throughout, some structural alterations to improve natural lighting and traffic flow and an extension of the retail letting area by 25%.

i. Comment on the concentration risks that this property currently poses to the portfolio and would pose after the proposed investment. [4]

TopProp’s proposal incorporates its outlook for retail property investments and ProPLS has given its approval to the proposal, but the Board of SALCo is anxious to obtain a wider range of inputs. The chairman asks for your views.

ii. Discuss the prospects for investment returns on South African retail property generally for the next 3 years in the light of prevailing and expected economic and property market conditions. [15]

iii. Explain why your view on the prospects for this particular property might differ from your view for the retail property market in general. [5]

The SALCo Board wishes to evaluate TopProp’s proposal thoroughly and you point out that the assumptions used in formulating the conclusions should be subjected to closer scrutiny.

iv. List the assumptions that you would expect to examine and, where applicable, the supporting evidence that might validate them. [8]
The table below shows TopProp’s forecast returns for the property if unaltered and if the proposal is implemented.

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>No upgrade</td>
<td>15%</td>
<td>13%</td>
<td>11.9%</td>
<td>11.8%</td>
<td>9.7%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Upgrade</td>
<td>15%</td>
<td>3.6%</td>
<td>4.2%</td>
<td>14.8%</td>
<td>15.3%</td>
<td>15.8%</td>
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</table>

A board member observes that if the upgrade goes ahead, an existing policyholder who leaves within three years will experience very low returns, while a new entrant after two years will immediately enjoy high returns. He is puzzled by this and is anxious that the directors not permit such inequity between generations of policyholders.

v.  
  a. Suggest possible explanations for the profile of forecast returns.
  b. Comment briefly on the implications for policyholder equity.  

[5]

The Board of SALCo is anxious to preserve the value of a major investment, but is hesitant to increase its exposure to this asset. As a result, it is considering some alternatives to the TopProp proposal.

vi. Comment on the merits and shortcomings of the following options:

  a. Scaling down the proposal so that the refurbishment is done now and the extension during a later phase, if warranted by economic and market conditions;
  b. Selling this property and buying a portfolio of smaller properties.  

[8]

[TOTAL 45]

Question 2

You are an independent trustee for a large South African defined benefit retirement fund with total assets of over R100bn. The fund currently has its local equity assets pertaining to active members managed by six large asset managers with identical mandates. The mandates specify the Shareholder Weighted All Share Index as a benchmark and allow for performance related fees if a manager produces returns in excess of the benchmark.

An asset consultant advising the fund has recommended changing to a core/satellite methodology with the core (approximately 75% of equities) invested in an indexed fund and specialist mandates for a small number of satellite portfolios.

i. Comment on the advantages and disadvantages of the proposed changes.  

[15]
ii. Discuss the merits of, and any problems related to, the inclusion of the following as satellite portfolios:

a. A small cap equity portfolio
b. A deep value style equity portfolio
c. A high dividend yielding equity portfolio
d. An equity portfolio managed exclusively using quantitative techniques.  

[14]

One of the funds under consideration is a quantitative fund which prefers to benchmark to an index that is equally weighted to the constituent shares of the SWIX Top 40 Index.

iii. Discuss the advantages and disadvantages of such an index compared with the capitalisation weighted SWIX Top 40 Index.  

[8]

Consideration is also being given to using a fundamental index as a benchmark. A fundamental index is an index where the weights given to individual shares are based on certain company fundamentals (e.g. sales, cash flow, dividends, etc).

iv. Discuss the additional considerations (not already mentioned in iv. above) that would influence the choice of such a benchmark.  

[4]

v. Comment on the suitability of an equal weighted benchmark for a satellite portfolio.  

[6]

The consultant advises that the core equity allocation could be invested via Exchange Traded Funds (ETFs), exchange traded derivatives or over the counter (OTC) derivatives.

vi. Describe the differences between these structures that might inform the decision on which vehicle to choose.  

[8]

[Total 55]

END OF PAPER