## EXAMINATION

## 27 April 2009 (pm)

## Subject SA2 - Life Insurance 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 Company X is a UK proprietary life insurance company that has only ever sold without profits business, and currently sells a range of products including equity release. The two equity release products (A and B) that Company X currently sells are both lifetime mortgages. Under these products, the policyholder takes out a loan secured on their home in return for an upfront cash lump sum payment from the insurance company. The loan is repaid when the home is sold (on death or earlier). The policy can be surrendered at which point the loan must be repaid. A no negative equity guarantee (NNEG) exists such that no more than the value received on the sale of the house needs to be repaid. The NNEG does not apply if the policyholder repays the loan early without selling the house.

Limits on the amount of cash which can be borrowed are set. These limits are called loan to value (LTV) limits and are expressed as a percentage of the house value.

Under Product A, the loan equals the upfront cash received by the policyholder plus an allowance for initial expenses. The loan increases monthly at a rate of interest that is fixed at the start of the policy. The pricing for profits, ongoing expenses and risks is allowed for in the interest rate.

Under Product B, the amount owed is higher than the upfront cash received, however it does not increase with interest.
(i) Discuss the advantages and disadvantages of these equity release products from the policyholder's point of view.

Loans arising from these products are treated as assets in Company X's balance sheets. It has been agreed that an acceptable accounting method for the value of the loan for all purposes (including the FSA returns) is to use the outstanding value of the loan, including for Product A any accrued interest.

In order to fund the initial outlay to the policyholder, the company borrows the amount required. The amount borrowed accrues at a monthly variable interest rate, and the company plans to repay this borrowing when the house is sold.
(ii) Discuss the advantages and disadvantages of selling these products from the company's point of view.
(iii) Describe how the company might calculate its Individual Capital Assessment (ICA) requirement in respect of the risks that it takes in selling these products.
(iv) Discuss the impact that each of the following suggestions would have individually on the ICA:
(a) The introduction of a swap arrangement with a merchant bank, whereby a stream of fixed payments is swapped for a stream of variable income based on actual interest rates. The swap profile is based on the company's best estimate of the expected income from loans being repaid.
(b) Reducing the maximum LTV ratio allowed.
(c) Increasing the minimum age at which policyholders can take out an equity release product.
(d) The introduction of a penalty for early surrenders under Product A. The penalty would be dependent on the difference between the fixed rate on the mortgage and the then current fixed rate being offered (i.e. so the penalty increases as interest rates fall).
(e) Charging the policyholder a variable rate of interest for Product A rather than a fixed rate.

The company is considering selling a new equity release product, Product C, under which the upfront cash released is not given directly to the policyholder but is converted into an immediate annuity payable for life. The calculation and repayment of the loan would work in exactly the same way as set out above for Product A, and the company would not need to borrow to fund the initial outlay.
(v) Discuss the implications of selling Product C for the company's Pillar 1 calculations.

2 A UK proprietary life insurance company has a large With Profits Fund (WPF) and a Non Profit Fund (NPF).

The WPF is closed to new business and contains conventional and unitised with profits business and a block of without profits business comprising protection, annuity and unit-linked business. The NPF is open to new business and contains all types of without profits business.

Shareholders receive all the profits arising in the NPF plus a share of the profits emerging within the WPF, receiving $10 \%$ of the profits distributed to with profits policyholders.
(i) Explain why the company may want to raise capital.

The company is considering raising capital through the securitisation of the future profits from the without profits business within the WPF.
(ii) Describe how the securitisation will impact available capital under Pillar 1. [6]
(iii) Discuss the process that the company is likely to follow when setting up the securitisation, including any issues that need to be addressed.
(iv) Discuss other ways by which the company could use expected future surpluses to raise finance.

## END OF PAPER

