

Solution X5.1**Comment**

This question has a number of parts looking at risk and risk management, the subject of [Chapter 23](#). The remaining two parts (parts (ii) and (iii)) are about a familiar topic, investment strategy, but in a novel context. Investment is covered in [Chapter 16](#) of the Course Notes.

(i) Managing longevity risk*Pricing*

Managing the longevity risk of an annuity contract may involve accepting the risk, but making sure that it is offered on the correct terms. [½]

The company should ensure:

- the latest available mortality data from all sources is used [½]
- the mortality assumptions used reflect the likely experience of the company's policyholders. [½]

In particular, the company should consider the latest mortality projection information and tools from the CMI, and from others, when deciding the approach to take to allowing for such improvements. [½]

External expertise (*eg* from reinsurers) may be useful in understanding the mortality risk and deciding on the mortality assumptions for pricing. [½]

The company could adopt a prudent approach to pricing, which would reduce the longevity risk being taken on, ... [½]

... but most likely at the expense of business volumes if the resultant annuitant terms are out of line with those of competitors. [½]

An alternative approach may be to change the product from without-profits to with-profits which would enable the risks to be shared with the policyholders. [½]

Monitoring

The company should ensure it understands the risk, by investigating its longevity experience carefully and keeping up to date with industry research. [1]

Reinsurance

The longevity risk of a block of annuity business can be reinsured. [½]

The benefits of reduced risk exposure and reduced capital requirements should be compared with the cost of the reinsurance. [½]

Reinsurance is not routinely sought on the majority of individual immediate annuity business but any very large cases, *eg* with a purchase price in millions of pounds, may be partially reinsured to reduce the exposure to the longevity risk associated with these individual lives. [½]

Reinsurers can also help the company in managing its longevity risk by providing advice on such matters as impaired life annuities and smoker/non-smoker rates. [½]

Underwriting

The company could introduce more rating factors to price more accurately, *eg* offer different annuity rates to different regions of the country, different states of health. [½]

In principle the company could underwrite annuities, declining or offering worse terms to healthy lives in order to manage its longevity risk. [½]

Prior to the 2015 pensions freedoms, it is unlikely to have done this in practice (other than if it sells impaired life annuities, *ie* offering better annuity terms to unhealthy lives). [½]

However, the potential for anti-selection is much higher since April 2015, and so the company is likely to increase its level of underwriting in order to guard against this. [½]

In particular, it may extend its range of rating factors. [½]

Asset-liability management

The company could try to partially hedge its longevity risk by using any available assets or derivatives, ... [½]

... *eg* mortality bonds, mortality swaps or principal-at-risk longevity bonds. [½]

The company could manage its longevity risk by securitisation of part or all of its in-force annuity business. [½]

This would involve the company receiving a capital sum now in return for the future profit stream from the annuities. [½]

This capital sum may exceed the value of the future profit stream from the annuities that the company is able to recognise on its Solvency II balance sheet, *eg* because of the Solvency II restrictions on the matching adjustment, ... [1]

... and the longevity risk would be passed to the investors in the securitisation. [½]

Again, the costs would be compared with the risk reduction benefits ... [½]

... especially as arranging a securitisation is more expensive and is likely to tie up more senior management time than any more readily available “off the shelf” solutions. [½]

Other

Selling high volumes of business will reduce the random fluctuation element of the longevity risk [½]

... although may be very difficult to achieve with the increased freedom customers have with how to use their pensions savings. [½]

Entering new sectors of the annuity market, *eg* bulk annuities, may also achieve the same effect. [½]

However, the risk of systematically underestimating longevity is probably more significant, and this risk is clearly smaller the smaller the volume of business. [½]

The company may therefore withdraw from the annuity market or place a limit on the volume of business sold. [½]

As these actions may be unattractive, the company could instead restrict the volume of business to which it retains exposure, *eg* by reinsuring business in excess of this limit. [½]

The company could look to *diversify* its business, in particular: [½]

- by product type, *eg* sell products with more mortality risk [½]
- by annuitant policyholder, *eg* by location or socio-economic group to reduce concentration risk. [½]

The company would need to ensure the overall risk exposure was balanced in order to achieve the diversification benefits. [½]

[Maximum 9]

(ii) *Attractions to the insurance company*

The basic investment principle of the life insurance company may be expressed as:

- to maximise investment return subject to meeting all contractual obligations ... [1]
- ... and recognising the uncertainties involved and the overall *risk* that the shareholders (of proprietary companies), regulators and policyholders are prepared to tolerate. [½]

The closer a company matches its liabilities with assets of similar nature, terms, types (including risk exposures) and currencies, the more likely will it be able to meet its contractual liabilities as they fall due. [½]

The proposed alternative assets may present a good match for the immediate annuities liabilities. In particular they are *long-term* assets. [½]

The insurer may be finding it difficult to find sufficient mainstream assets, *eg* corporate bonds, of sufficiently long term. [½]

The assets may also provide a good match to the liabilities by *nature* ... [½]

... for example the amounts paid by the government or other institution may contractually increase in line with an inflation index, providing a good match for any index-linked annuities. [½]

The cashflows of a large in-force portfolio of annuity business are fairly certain and again this represents a good match with the asset. [½]

In particular, immediate annuities cannot be surrendered and so there is no need for liquidity in the backing assets. The proposed assets are *illiquid*. [1]

The illiquidity of the assets may mean that they are relatively unattractive to other investors who need more liquidity in their portfolios. The returns the assets offer may therefore be relatively attractive to the annuity provider. [½]

If these assets have suitably fixed cashflows, the insurer may be able to benefit from the use of the matching adjustment and so reduce their liabilities. [½]

They may provide an opportunity for the company to invest in assets that yield more than corporate bonds, without increasing credit risk beyond the insurer's risk appetite. [½]

As the counterparty is generally the government, or some other institution largely backed by government, *eg* universities, the credit risk is likely to be low. [½]

Current market conditions and, in particular low returns on more traditional assets such as government and corporate bonds, may increase the incentive for the company to look at such less liquid, alternative assets. [1]

As this is a relatively new investment class for insurers, investment returns may be currently higher for companies that are among the first to enter the market [½]

Increasing yields is especially important as the annuity portfolio is large and so generating additional return from its investments will have a significant benefit for the company. [½]

Being large also puts the company in a better position to invest in such assets than smaller annuity providers, *eg* infrastructure projects have large unit size, so a large fund is required to achieve portfolio diversification, ... [½]

... and the large size of the company may enable it to afford to hire a specialist team to manage these investments. [½]

The company may be keen to exploit this competitive advantage. [½]

The assets will provide diversification of the company's portfolio. [½]

This will reduce the company's market risk exposure ... [½]

... and may reduce its capital requirements (depending on the size of the diversification benefit compared to the capital requirements of these investments). [½]

The company may see such investments as enhancing its reputation, *eg* by being seen to invest in UK infrastructure to boost economic growth, provide housing *etc.* [½]

As it involves the construction and ownership of physical assets, the investments will provide good collateral for the insurer to use. [½]

[Maximum 7]

(iii) ***Practical difficulties***

Note to markers: please cross-mark between parts (iii) and (iv), ie give credit if student makes a valid point in either part of their answer.

Once it has made a decision to invest in such assets, the company will still have to source suitable investment opportunities. [½]

The timelag to do this is likely to be quite long ... [½]

... and unpredictable. [½]

This may be a particular issue if the insurer wants to invest in such assets for new annuity business as well as for its existing business ... [½]

... as the company would make a loss if it sold a tranche of business that it expected to be backed by infrastructure assets, but was then actually backed by corporate bonds offering a lower return. [½]

A potential solution would be for the company to “warehouse” potential assets in advance ... [½]

... which would involve additional costs and capital being tied up. [½]

A lack of availability of suitable infrastructure projects may also limit the volumes of business that can be sold. [½]

Particularly as a new investor in these assets, it may be difficult for the insurer to gain knowledge of and access to potential deals. [½]

This may be made easier if other potential finance suppliers, *eg* banks and the government, are less inclined to invest than they have been in the past. [½]

However, when an opportunity is sourced, there may then be pressure to complete a deal quickly. [½]

This will put pressure on the company in performing its analysis of the project, cashflow projections and all due diligence to challenging timescales while retaining good quality. [1]

These tasks will also be made more difficult by the uniqueness of each potential investment, meaning that there are likely to be few elements that are standard in any case. [½]

Each potential asset is likely to be large scale / have large unit size. [½]

This will make investment practical only for large annuity funds such as this one. [½]

However, even with its large funds, the insurer will only be able to make a relatively small number of separate investments. This may increase the “lumpiness” of its cashflows. [½]

The assessment and ongoing management of projects will require significant resources, including time from quite senior staff. [1]

As with many of these practical problems, this may be especially true when getting involved in this area for the first time. [½]

The company will need to build or recruit its expertise and experience in assessing and managing these kinds of assets. [½]

The skills involved are likely to be substantially different from those needed to manage the other assets in its portfolio. [½]

Practical problems once an investment has been made include:

- specifying and producing appropriate management information to allow risk exposures and asset performance to be monitored and managed [1]
- pricing / valuing the assets, as the usual market values or modelling approaches used for bonds will not be suitable [½]
- assessing the capital requirements in relation to the risks the investments present. [½]
- Each of these is likely to require the development of bespoke models ... [½]
- ... for which there will be a lack of data to set assumptions (at least until the portfolio has had time to build up). [½]
- The solvency capital requirements in respect of these investments may be large, ... [½]
- ... for example, such investments may be harshly treated under the Solvency II SCR standard formula. [½]

[Maximum 8]

(iv) ***Risks to the insurance company***

Credit risk

The insurer faces the risk that the payments under the asset contracts are not made. [½]

For example, the underlying project may hit problems (eg construction company defaults on its obligations, delays or non-delivery of operational building) or the other party defaults on payments. [1]

Even if considering a good counterparty (eg government) there is a risk of non-payment due to contractual issues, eg disagreements relating to the quality of the building and services delivered. [½]

Credit risk is especially important given the illiquidity of the asset. The insurance company is unlikely to be able to sell the asset in future in the event of any credit worsening. [1]

Market risk

The insurer faces the risk of differences between actual and expected returns on the asset. [½]

The fact that the asset cashflows will not be a perfect match to the annuity cashflows, ie not exactly the same amounts on exactly the same days, presents market risk. [½]

Also, the assets cannot match the liabilities on all the different bases on which the insurance company assesses them, eg Solvency II, economic capital, EV, IFRS. [½]

For example, the discount rates for these various reported balance sheets may be derived from swap rates or government bond yields, may be extrapolated to an ultimate forward rate at longer durations, and/or may use a matching adjustment, or a combination of these. [½]

The company will therefore face market risk in regard to at least some of the balance sheet discount rates. [½]

Property risks

The insurer face the risks involved in the underlying property assets eg:

- obsolescence [½]
- higher than expected development and maintenance costs [½]
- void risk ... [½]
- ... although this should be small given the long-term nature of the contracts agreed with future tenants prior to development. [½]

The insurer also faces the risk of physical damage to the developments, eg due to flooding, weather damage, fire. [1]

This could in theory be reduced by geographical diversification, ... [½]

... but this may be challenging to achieve given the large potential scale of each project. [½]

Operational risk

As this is the first time the company has invested in assets of this nature, it faces a number of operational risks of which it may well have no previous experience. [½]

Examples include:

- agreeing and then monitoring constructions contracts [½]
- and service delivery contracts, *eg* cleaning, property maintenance and repair [½]
- poorly-trained and inexperienced staff as this is a very different asset from most that the company manages. [½]

The operational risks may be increased as each investment is likely to be unique and so relatively little of the management of the asset will be standard practice. [½]

The insurer may choose to outsource the operational aspects of managing the assets, but these agreements with outsourcing companies would then themselves be sources of risk and require monitoring. [1]

Expense risk

There is a risk that the cost of managing these projects is higher than expected, reducing the net return that the company achieves from them. [½]

Although the company will be aware of high expected levels of expenses given the complexity of these investments, the uniqueness of the projects, especially as the company is engaging in them for the first time, means that expense over-runs are likely. [½]

There is also the potential for greater than expected cost in terms of diverting management time and other resources away from other activities. [½]

Longevity risk

The assets do not match the liabilities in terms of their exposure to longevity changes. So, for example the company would face the risk of longevity improvements greater than assumed when setting its annuity rates. [½]

Liquidity risk

Although the company believes its liabilities to be illiquid, there is a risk of an unanticipated need for liquidity. [½]

For example:

- a regulatory change that resulted in annuitants having some right to access their funds once their annuity was in payment
- a change in Solvency II, MCEV or IFRS rules that reduced the attractiveness of these assets for one of these measures.

[½ for any good example]

Prepayment risk

The infrastructure projects may give the operator of the properties the option to terminate the agreement and purchase the properties at points during the contract. [½]

The company would then face the risk of having to invest a future lump sum on uncertain terms, *ie* reinvestment risk. [½]

Political risks

Infrastructure and housing / university projects are all in areas where government policy plays a significant role and can change over time, *eg* increasing the rights of social housing tenants, capping rent levels, changing student funding and target student numbers. [1]

Especially given the long-term nature of these investments, there is a risk that a change in government policy reduces the return from the asset. [½]

Regulatory risks

There is the risk that the treatment of the asset under various regulations changes during the period which the company is invested. [½]

For example, the company may invest in the belief that the asset will be entitled to the matching adjustment under Solvency II, but if the rules emerged or changed such that this was not the case, then the company's solvency position would be worse than it expected. [1]

Reputational risks

The company faces the risk of bad publicity and reputational damage in operating the asset, *eg* in pursuing and ultimately evicting tenants in relation to unpaid rent. [½]

Currency risk

Infrastructure investment opportunities may be overseas and provide revenues in overseas currencies, resulting in the risk of adverse exchange rate movements. [½]
[Maximum 14]

(v) Controlling credit risk

The company should have in place systems to monitor its credit risk exposures and produce regular management information, and management should review this on a regular basis. [1]

It should have a clearly-defined risk appetite for credit risk and processes in place to assess on a continuing basis whether credit exposures are within that appetite. [½]

This will enable it to restrict its exposure to different projects and counterparties to levels that are consistent with its risk appetite and capital resources, and to ensure that those exposures are adequately diversified. [½]

It is particularly important to be happy with the credit risk exposure on each proposed project, given that the illiquid nature of these investments will make it hard to disinvest later. [1]

Thorough due diligence should be done before any investments are put in place. [½]

Although the company should already have good credit risk governance processes, aspects of these, *eg* setting and monitoring risk tolerances and exposure limits, may be more difficult than usual given the unusual nature of the counterparties, *eg* exposure to construction companies. [1]

Monitoring credit risk during the term of the project will also be more difficult than for corporate bonds as the infrastructure assets do not have a market price and so there is no observable credit spread. [1]

The company should consider the skills needed to assess these risks and consider engaging external expertise to assist in their assessment and measurement or recruiting staff with these skills, *eg* former rating agency staff. [1]

The company should hold capital to back the credit risks to which it is exposed. [½]

In particular, the company should make adequate allowance for credit risk in assessing its capital requirements, including the SCR under Solvency II. [½]

The company should only enter into such projects with institutions of sufficiently high credit rating, *eg* only national government and not smaller universities or housing associations. [1]

It should also assess the credit worthiness of its partners in such projects, *eg* building firms, contractors providing services to the properties. [½]

It may require collateral or guarantees from these parties to reduce its credit risk exposure. [½]

It should also consider the replacement risk, *ie* if one party were to default on its obligations, how difficult and costly would it be to engage a replacement. [½]

To reduce exposure to any one party, the company could diversify the contractors with whom it partners ... [½]

... although this may introduce increased operational complexity and risk. [½]

Robust, clearly-worded service level agreements should be put in place with third party providers. [½]

[Maximum 7]

Solution X5.2**Comment**

This question looks at a variety of different aspects of unitised with-profits contracts from throughout the course, eg the different types of contract are discussed briefly in [Chapter 1](#), surplus distribution is covered in [Chapter 21](#), management of UK with-profits funds is covered in [Chapter 22](#) and risk management is covered in [Chapter 23](#).

(i) Main types of policy and their run-off pattern*Pensions contracts funding for cash*

Many of the with-profits policies may have been written as pension savings vehicles to provide a lump sum at retirement. [½]

Some of these policies will already have gone off the books, eg a 50-year old buying one of these contracts 20 years ago will have probably already retired. [½]

There will be a steady stream of policyholders reaching retirement each month. [½]

Although the last policy may not mature for at least another 40 years, eg a 20-year old may have taken out a policy just before the book was closed to new business five years ago. [½]

Pensions contracts with a guaranteed annuity option

Some pension savings contracts may have included a guaranteed annuity option (GAO). [½]

If the policyholder exercises this option then the term of the contract could be greatly extended compared to a contract that only offered a cash benefit. [½]

However, the run-off pattern of these contracts might be the same as for the pension contracts funding for cash if the annuity could be written in the without-profits fund. [½]

Endowments with guaranteed death benefits

Many of the with-profits policies may have been written as endowment assurances, eg in order to repay a mortgage at the end of the term or on earlier death. [½]

Some of these contracts may have already gone off the books through death or surrender. [½]

A common term for these policies would have been twenty-five years, so the first policies that the company sold may be coming up to maturity now. [½]

These policies were popular in the early 1990s, but much less popular since, so the majority of the policies may be due to mature within the next five years or so. [½]

Single premium bonds

Savings products may have been written as single premium bonds with a fixed maturity date and say 101% of the fund value paid on death. [½]

As these policies have a fixed maturity date, the run-off pattern will be reasonably predictable with similar features to the endowment assurances described above. [½]

However, the term of the bonds may be different to the endowment assurances and sales may well have continued after mortgage endowments lost their popularity. [½]

Whole of life

Some products may have been written on a whole of life basis, *eg* as open-ended savings contracts or for inheritance planning. [½]

Some of these policies will already have gone off the books as surrenders or deaths. [½]

The whole of life nature of these policies means that they have potentially both the longest and most uncertain run-off period. [½]

[Maximum 5]

(ii) ***Determination of benefit amounts***

Determination of maturity benefits

This applies to all the contracts mentioned in part (i) except for the whole of life contracts. [½]

The aim will be to pay out a percentage of smoothed asset share. [½]

The smoothing methodology will have been explained in the company's marketing literature and PPFM. [½]

The smoothing methodology could be formula driven or largely based on the directors' discretion. [½]

FCA rules relating to treating with-profits policyholders fairly require all companies writing with-profits business to specify a target range around unsmoothed asset share within which payouts must lie. [½]

Asset share is the retrospective accumulation of premiums less expenses (or possibly charges) less the cost of any death benefits, rolled up at an earned rate of interest. [1]

Other adjustments may be made in respect of:

- surplus from with-profits surrenders – the significance of this will depend on how surrender payouts compare with asset shares.
- shareholder transfers – as shareholders receive 10% of the cost of the surplus distributed.
- tax – for life business, investment and expenses should be netted down as appropriate (gross figures would be used for pensions business).
- cost of capital – a charge could be deducted for the opportunity cost of holding any capital required to support supervisory reserves. If so, should also give credit for capital supplied (if any) at later durations.
- cost of guarantees and options – a charge could be deducted for the cost of the maturity guarantees; a charge should also be deducted for the cost of the GAO (to maintain consistency with contracts without this option).
- charge to build up the estate – would need to have been publicised and so might have made the products less attractive.

[Up to 1 mark for a discussion of each item on the above list]

The percentage of asset share that is paid out might be affected by the company's plans for its estate, *eg* it might wish to distribute some of the estate to avoid the build-up of a tontine effect. [1]

Determination of death benefits

For pension contracts the death benefit will most likely be the bid value of units. [½]

For the endowment assurances the death benefit could take the form "bid value of units or £X if higher". [½]

For savings contracts, such as the single premium bonds, the death benefit would be slightly higher than a return of the fund, *eg* 101% of the fund value. [½]

For whole life contracts, asset shares may be used to determine suitable terminal bonus rate scales which can be supported for all future deaths. [½]

Determination of surrender (or transfer) benefits

It would not be possible to surrender the pension products, but policyholders would have the option to take a transfer value to invest with another pension provider. [½]

The starting point for surrender and transfer values will be the bid value of units. [½]

The company might want to impose a surrender penalty if insufficient charges have been received to recoup the full initial expenses incurred under the policy. [½]

However, the contracts are already at least five years old, so this will become less of an issue over time. [½]

The format of the surrender penalty will depend on the types of charges used to recoup the initial expenses. [½]

If initial expenses are recouped via a reduced level allocation rate, then the penalty would be expressed in monetary terms. [½]

However, if there is only a fund management charge, then the penalty will be expressed as a percentage of the fund. [½]

A separate issue is whether to apply a market value reduction (MVR) to the bid value of units on surrender. [½]

The aim of such an adjustment is to protect the with-profits fund from financial selection following a stockmarket fall. [½]

Theoretically, the MVR should equal the excess of the bid value of units over the asset share. [½]

However, MVRs are not popular with policyholders ... [½]

... so the company may decide that an MVR will only be applied if the asset share is substantially below the bid value of units and there is a substantial number of surrenders. [1]

Current market practice might also limit the acceptable size of the MVR and the time period over which it applies. [½]

The company will also be restricted by policyholders' expectations based on past communications. [½]

Alternatively, the company may wish to add a terminal bonus to the bid value of units. [½]

The terminal bonus would be calculated so that the surrender value was reasonably close to a smoothed asset share. [½]

At later durations, the surrender value should be consistent with the expected maturity payout. [½]

The surrender value calculation should also be consistent with the practices described in the PPFM. [½]

[Maximum 14]

(iii) ***Risks of running a closed with-profits book***

Counterparty risk

The with-profits fund may become increasingly exposed to the risk that a counterparty fails to perform its contractual obligations. [½]

For example:

- the company may make greater use of reinsurance to reduce its mortality / longevity risk [½]
- the company may purchase derivatives from a bank to manage its market risk [½]
- the company may outsource various administrative functions to reduce the impact of increasing per policy expenses. [½]

Market risk

The fund has a healthy solvency position, so currently it has lots of capital to absorb investment risk. [½]

So a large proportion of the fund can be invested in equities and property (in search of higher expected returns). [½]

However, investment risk may become more significant as the business runs off. [½]

As the fund becomes smaller, it may become less well diversified, and so investment returns may become more volatile. [½]

As the business nears maturity, guarantees may become more significant ... [½]

... leading to a greater risk that a fall in asset values could cause the guarantees to bite. [½]

So the investment strategy may need to be more constrained over time to reduce market risk, ... [½]

... eg a higher proportion of investment in government fixed-interest bonds. [½]

An alternative to using fixed-interest bonds to match maturity guarantees would be to hedge using derivatives (eg using put options). [½]

If pension contracts include a guaranteed annuity option, then the company is also exposed to the risk of falling interest rates. [½]

This could also be hedged using derivatives, *eg* a swaption to swap floating interest rates for the fixed interest rate implicit in the guarantee. [½]

It is likely that the estate will be gradually distributed over time ... [½]

... which in turn will reduce the capital available to absorb market risk and will increase the need for a less risky investment strategy. [½]

Liquidity risk

The fund will face an increasing need for liquidity ... [½]

... as there will be no new business premiums to over the claim outgo from maturing policies. [½]

Operational risk

There is a danger that service standards could fall as the portfolio runs down ... [½]

... which could lead to higher customer complaints ... [½]

... and higher withdrawals. [½]

Insurance risk

The most critical part of insurance risk is likely to relate to expense overruns. [½]

Per policy costs are likely to increase as fixed costs (such as bonus setting) will be spread over fewer and fewer policies ... [½]

... particularly if the administration is performed in-house. [½]

The company could consider outsourcing the administration of the with-profits business on fixed terms in order to reduce this risk. [½]

However, the expense risk is much lower in respect of functions that are shared with the without-profits fund, as this will remain open. [½]

The fund is exposed to mortality risk in respect of the additional 1% paid on death for savings contracts ... [½]

... or if the sum assured exceeds the bid value of units on endowment contracts. [½]

The fund is also exposed to the risk of increasing longevity if it offers a guaranteed annuity option on pensions business. [½]

The fund is exposed to persistency risk if surrender values are paid in excess of asset share, *eg* if the company is unwilling to impose an MVR. [½]

Group risk

Any problems affecting the run off of the with-profits fund may have a knock on effect on the reputation of the without-profits fund. [½]

This would be a concern as the company will be hoping that it can still attract new business into the without-profits fund. [½]

Tontine risk

The fund is in a healthy solvency position, so there is a considerable estate to distribute to policyholders and shareholders. [½]

The company will wish to avoid the risk that disproportionately large payouts are made to the last few policyholders (the tontine effect). [½]

However, the company must avoid the risk that the capital is distributed too soon, requiring an injection of shareholder capital at a later date. [½]

So the company may wish to gradually reduce the risk held within the fund, *eg* through reinsurance, investment strategy or outsourcing (as described above) ... [½]

... or by distributing a greater proportion of surplus through terminal bonus than regular bonus. [½]

Reducing the level of smoothing employed would also allow capital to be released (and so reduce the potential for a tontine effect). [½]

However, policyholders' reasonable expectations will need to be considered whenever the company changes the way it manages the fund. [½]

Tax risk

The taxation position of the BLAGAB business may change between XSI and XSE at various points in time. [½]

For example, per policy expenses will rise as the number of policies fall. [½]

Also investment returns will change because the fund is contracting and the investment strategy will change over time. [½]

This uncertainty in the tax position makes it more difficult to project the run off of the fund and make decisions regarding issues such as the distribution of the estate. [½]
[Maximum 14]

(iv) ***Switching proposal***

Merits of allowing with-profits policyholders to switch out of the fund

Managing the closed book of with-profits business is complex and time consuming ... [½]

... and ties up capital to protect against the various risks described in part (iii). [½]

The suggested scheme will encourage some policyholders to switch out ... [½]

... and so will hasten the release of capital from the fund. [½]

However, many policyholders are likely to choose to remain within the with-profits fund ... [½]

... so the company will still incur the costs of managing this business. [½]

Although the number of policies within the with-profits fund will fall, these policies are not lost to the company, and the shareholders will continue to receive profits from these policies. [½]

The shareholders will now receive 100% of the surplus arising on these policies (instead of 10%) ... [½]

... but the sources of surplus will have changed, as will the potential risks ... [½]

... for example, in the with-profits fund the policyholders and shareholders may well have shared investment, expense and mortality risks, whereas in the without-profits fund the investment risk will now lie with the policyholders (although there may be some investment risk in terms of the fund management charge) and other risks will lie with shareholders. [1]

Merits of the proposed calculation

The proposal aims to leave the policyholder in the same situation as if they had surrendered their policy and taken out a new one. [½]

The policyholder would be no worse off actually surrendering and taking out a new policy with another provider, ... [½]

... so the only incentive not to move elsewhere is a small saving in paperwork. [½]

The company could afford to grant better terms than those proposed, since it will not be incurring any more initial expenses. [½]

If there is a bid-offer spread, then units could be purchased at bid price rather than offer price. [½]

A fixed switching fee could be deducted to cover the cost of performing the switch – this cost is likely to be considerably less than the cost of setting up a new policy. [½]

However, many companies allow a number of free switches each year. [½]

The surrender value will incorporate any surrender penalty designed to recover any unrecouped initial expenses (although this is likely to be small given the maturity of the business). This is unnecessary since the policy would be continuing in force. [1]

The surrender value will include any current MVR and/or any terminal bonus entitlement, so might bear no relation to the face value of units. [1]

This will make it hard for the policyholder to see the terms as equitable. [½]

It is right to impose an MVR on switching, otherwise policyholders could avoid the impact of any drop in asset values, *ie* select against the company. [½]

It is also right to apply a terminal bonus, to treat policyholders fairly if the underlying assets have outperformed the regular bonuses added to the fund. [½]

[Maximum 8]

(v) ***Proposal to convert remaining with-profits contracts to without-profits***

Merits of proposal

As the fund runs off it will become more difficult to manage efficiently and so it may be better to transfer the business to the without-profits fund. [½]

However, the without-profits business operates in a fundamentally different way to with-profits business, so conversion is likely to go against what policyholders would expect (at least until the fund becomes very small). [½]

So as the fund has only been closed for five years, it may be too early at this stage to convert to without-profits. [½]

But ultimately a transfer to the without-profits fund may be in everyone's best interests. [½]

The timing of the transfer will depend on how quickly the business is running off (as discussed in part (i)). [½]

As the with-profits business runs off, the value of the assets will decrease making it harder to maintain a diversified portfolio ... [½]

... and increasing investment expenses on a per policy basis. [½]

The investments could be more efficiently managed in the without-profits fund as this will remain open. [½]

An alternative approach to maintain economies of scale would be to invest the with-profits assets in a collective investment scheme ... [½]

... but this would make it harder to match assets to liabilities, eg if the company wanted to hold bonds of appropriate term to match guarantees. [½]

The company would no longer incur the expenses specific to the with-profits fund ... [½]

... and the administration of the without-profits fund could now be spread over the entire business. [½]

In contrast, under the suggestion in part (iv), many policies would remain in the with-profits fund, so the company would need to maintain with-profits systems for bonus setting, reserving, record keeping etc.

Closing the with-profits fund may reduce overall capital requirements. [½]

As the fund becomes smaller it becomes more volatile ... [½]

... and smoothing out this volatility becomes more difficult, requiring capital to be held back to avoid the last few policyholders carrying excessive risk. [½]

By closing the with-profits fund now, the risk of a tontine building up is removed. [½]

The excess capital can be shared fairly between all existing policyholders and shareholders ... [½]

... in particular, equity can be maintained between policies that would go off the books in the near future and those that would remain in force the longest. [½]

The shareholders will also benefit from an immediate release of their share of any excess capital ... [½]

... although the shareholders may need to inject more capital into the without-profits fund to support the increased levels of business there. [½]

Conversion terms to be given

The company would need to decide whether to convert to a conventional without-profits contract or a unit-linked contract for each policy type. [½]

Conversion to unit-linked may be easier to explain to policyholders as the contract continues to involve the purchase of units with premiums and the deduction of explicit charges. [½]

The approach used will affect the future profits that the shareholders will receive ... [½]

... for conventional without-profits contracts the shareholders will benefit from all sources of surplus, but will also be exposed to all sources of risk ... [½]

... for unit-linked contracts the shareholders profit will be derived from any excess of charges over expenses and any guarantee costs (such as on death). [½]

Note that unlike the option to switch to unit-linked in part (iv), the proposal to transfer the business to the without-profits fund would apply to all policyholders. [½]

A switch to a unit-linked contract could be unpopular with policyholders as they would lose the guarantees and smoothing offered by with-profits. [½]

However, this may be less of a concern if the with-profits contracts have built up a considerable terminal bonus element such that guarantees are far out of the money. [½]

A switch to a conventional without-profits contract could also be unpopular as policyholders would lose the exposure to investments with a higher expected return. [½]

However, if the company intends to substantially de-risk the investment strategy as the with-profits fund runs off, then the returns from a conventional without-profits policy may be very similar. [½]

The company would need to set the terms for the conversion. [½]

This would involve placing a value on the existing contract, *eg* using the formula discussed in part (iv) ... [½]

... and determining the benefits this would buy in the new contract. [½]

An allowance should also be made to allocate a portion of the estate to each policy. [½]

However, a deduction might be made to cover the costs of the conversion exercise. [½]

The terms offered should be fair to policyholders and shareholders. [½]

Policyholder communication

The company would need to communicate with policyholders so that they could assess the likely impact on their benefits. [½]

There will be an increased number of queries from worried policyholders to deal with. [½]

The company may want to set up a customer retention team to avoid a mass lapse when policyholders hear the news. [½]

The company needs to communicate with brokers to maintain their confidence to ensure future sales within the without-profits fund. [½]

The company also needs to communicate with the market to protect its share price. [½]

Communications to policyholders would need to be in a more customer-friendly format than communications to brokers or the market. [½]

Legal requirements

Court approval would be required to transfer all the with-profits policies to the without-profits fund. [½]

This would involve considerable work, and expense, for the company, *eg* publicising the scheme to policyholders. [½]

Policyholders may be offered the chance to vote on the proposal and a sufficient proportion of policyholders would need to vote in favour. [½]

The company would have to consult with the regulators to gain their approval. [½]

The company should also consider this in their run off plan. [½]

The requirements of the Transformations TAS would need to be followed. [½]

[Maximum 14]