

**Subject ST2 — Life Insurance  
Specialist Technical**

**EXAMINERS' REPORT**

**September 2008**

**Introduction**

The attached subject report has been written by the Principal Examiner with the aim of helping candidates. The questions and comments are based around Core Reading as the interpretation of the syllabus to which the examiners are working. They have however given credit for any alternative approach or interpretation which they consider to be reasonable.

R D Muckart  
Chairman of the Board of Examiners

December 2008

**Comments**

These are given at the beginning of each question.

- 1** *This question was well answered by most students, Whilst most candidates identified the main points, few candidates knew all of the book work.*

A company will have non-unit liabilities under its unitised contracts, e.g. expenses, or benefits in excess of the unit value, for which it receives monetary payments in the form of future charges it extracts from the policies.

If it expects that charges will not be sufficient to meet these liabilities at any point on a cashflow basis, it has to hold a non-unit reserve to provide for the deficiency.

It may be possible for a company to hold a negative non-unit reserve, where it expects the future charges will be more than sufficient to meet the future non-unit liabilities.

- 2** *Generally parts (i) and (ii) were answered well, with part (iii) being less well answered. In part (i), the most common mistakes were candidates not using the information provided in the question and candidates failing to define all of the items in the formula.*

(i) 
$$(S + f) \bar{A}_{x+t:n-t} + e \ddot{a}_{x+t:n-t}^{(m)} - G \ddot{a}_{x+t:n-t}^{(m)} - C$$

Where:

$S$  is the sum assured

$f$  is the normal claims expenses

$x$  is the age of the policyholder at date of issue

$t$  is the duration of the policy since inception

$n$  is the term of the endowment

$m$  is the frequency of the premium

$G$  is annualised premium

$C$  is the cost of the surrender

$e$  is the annual expense from administering the policy

- (ii) The surrender value should take into account:
- policyholder's reasonable expectations
  - fairness to both the exiting customers and those customers remaining
  - not exceed asset shares, in aggregate, over a reasonable period of time
  - should not appear too low at early durations compared to premiums paid and projections given at the new business stage
  - competitors' offerings
  - be consistent with maturity values at later durations
  - be consistent with what the sum assured would be if the outstanding term was reduced to zero
  - not be subject to frequent change, unless economic conditions dictate
  - not being excessively complicated to calculate
  - be capable of being documented

- profit on surrender should be consistent to as if the policy had not been exiting
- the lapse and re-entry risk of setting too high a surrender value
- the need for compliance with any regulations or professional guidance

(iii) Additional considerations for paid up sum assured:

- there is a need to consider expenses not just for making the alteration to the contract, but also the ongoing maintenance expenses
- the effect of mortality selection likely to be less than for surrendered policy because policy remains in force
- the paid up sum assured should be consistent with surrender values
- the surrender value should be the same before and after conversion
- the paid up sum assured should be supported by the earned asset share, at the date of conversion, on the basis of expected future experience
- the paid up sum assured should, at later durations, be consistent with projected maturity values allowing for premiums not received
- the paid up sum assured should be consistent with an alteration where the premium is reduced close to zero
- the profit taken at being made paid up should be consistent to as if policy had stayed premium paying

**3** *Part (i) was well answered and is standard book work; the most common error made by candidates was to answer why a company would perform an analysis of surplus. Part (ii) was poorly answered. The most common mistake made was to refer to a retrospective asset share on a term assurance product, rather than considering a prospective comparison of premiums, claims, expenses and reserves. Parts (iii) and (iv) were typically well answered.*

(i) A company will analyse the change in its embedded value in order to:

- validate the calculations, assumptions and data used
- reconcile values for successive years
- provide management information
- provide detail to publish in its company accounts, for example, the value of new business written
- provide information as part of a prospectus for sale of the company

(ii) The withdrawal itself will have no cost associated with it.

The company will lose the value of future premiums, this will be offset by the expected value of claims that will no longer occur and any reduction in the expenses of managing the policy and paying the claim. There may also be a release of reserves.

The impact on the embedded value will depend on whether the value of future premiums is greater than the expected value of the claims and expenses and the reserve release.

Early on in the term of a policy you would expect the value of future premiums to exceed the value of future claims, expenses and reserve.

So the embedded value will tend to reduce on lapse.

Over time the cost of claims increase as policyholder's age whereas premiums are normally level. There is also likely to be an increase in reserve held.

It is possible that close to the end of the term of the policy the expected value of claims, expenses and reserve release exceeds the value of future premiums.

So the embedded value may increase on lapse.

The impact may also be distorted by reinsurance, if the timing of reinsurance premiums and claims are not in the same proportion as the overall premiums and claims.

In addition, there may be distortions from an uneven incidence of premiums, for example, escalating premiums or premiums stopping before the end of the term of the contract.

If the experience leads to a change in the assumption for future withdrawals, then there will be an additional impact on the embedded value.

In addition, higher withdrawals may lead to higher per policy costs, which in turn reduces the embedded value.

Higher withdrawals may be selective, which may affect the mortality assumption.

- (iii) It is possible that other companies have advertised lower premium rates such that customers can get the same benefits cheaper.

The company may have even reduced its own rates leading to lapse and re-entry.

Advisors may actively review market rates and highlight opportunities for customers and encourage them to withdraw and take out other cover.

Alternatively, mis-selling by advisers or the company may have led to inappropriate sales and higher subsequent lapse experience.

There may be an economic downturn, leading to customers having less money to pay premiums.

The company may have recently suffered bad publicity.

This may be driven by the poor customer service.

In particular bad publicity about its claims handling may reduce the confidence of the customer in the company.

The higher level of withdrawals may be as a result of random fluctuations.

The original assumption may have been unrealistic.

- (iv) The company is likely to subdivide data by duration from entry as experience may differ by the time a policy has been in force. For example, there may be a higher incidence of lapses early on in the term.

The company is also likely to split its data by source of business, different distribution channels may have different experience. For example, business from advisors may be worse than through direct sales channels as advisors may more actively search for improved terms for their clients.

In addition experience from different individual distributors may be different and the company may wish to look into this.

The socio-economic grouping of customers may also be explored as customers in different groups may exhibit different behaviours. Premium size or geographical location may be used as a proxy here.

In addition the company may split data by the age or sex of the policyholder.

The company may also want to isolate customers who had been accepted on loaded premiums. These may exhibit worse experience if medical conditions causing their loadings had cleared up such that they could now get cheaper cover.

If different policy types with different options are in force, data may also be split into the distinct variants.

Different premium payment methods may also be analysed as well as premium frequencies, for example separating out single premium policies.

The company may split the data by type of term assurance (eg level term, decreasing term) to determine whether the higher withdrawals relate to a particular product type.

The company may also split the data by original term, splitting the analysis into short term and longer term policies.

The company may also take into account specific events that might affect withdrawal experience, for example, changes to the way the policy is taxed.

The number of divisions used will depend in part on the volume of data available. The company will be keen to ensure each data cell used is credible such that results are meaningful.

- 4     *This question was not very well answered. The better candidates were able to suggest improvements to those items mentioned in the question. Where candidates struggled was in identifying missing elements of the asset share.*

*Investment return*

- It is acceptable to base the return on indices, but it would be preferable to use the actual return achieved on the underlying assets.
- The return should be based on all of the types of asset in which the with profits fund is invested, not just equities.
- The assets are also likely to include overseas equities, property and fixed interest investments.
- The precise allocation of assets appropriate to this policy might take into account its duration in force and/or accrued level of guarantees.
- The investment return may need to be netted down to reflect tax.
- Other items in the formula need to be increased by investment return.
- For example, premiums and expenses could be assumed to occur halfway through the year and therefore should be increased by half a year's investment return. Alternatively, premiums and expenses can be allowed for monthly including the appropriate increase for investment return.
- Smoothed investment return may be allowed for since some companies may use this approach.

*Premium*

- It would need to be checked that this policy does not become paid-up during the year.

*Expenses*

- It is not clear that allowance has been made for investment expenses, this should be explicit.
- The same is true for overheads.
- Allocating expenses completely on a "per policy" basis might not be appropriate.
- The expenses and commission may both need to be netted down for tax.
- Need to ensure that the expense loading allows for an appropriate period of inflation.

*Death Benefit*

- The treatment of the cost of the death benefit is inaccurate. It should not be based on the whole guaranteed minimum sum assured, but the excess of the actual death benefit over the asset share, where the actual death benefit allows for bonuses.
- It should also be divided by  $(1 - q_x)$  to reflect the fact that the cost can only be shared across those policyholders that survive the year.
- The table from which  $q_x$  is to be taken should be defined.
- Alternatively the cost could be based on the actual mortality experience during the year.

*Annual bonus*

- This should not be included in the calculation as it has no impact on the asset share, which reflects the build-up of actual assets underlying the policy rather than the build-up of the benefits that are communicated to the policyholder.

*Shareholder transfer*

- This should be a deduction from the asset share, not an addition.

*Other items*

The formula could also include:

- the cost of providing any guarantees or options
- the cost of any capital necessary to support contracts in the early years
- a contribution to the free assets, which support the smoothing of bonuses and investment freedom
- an allocation of profits on without profits business, if appropriate
- an allocation of profits on surrenders of other with profits contracts

**5** *In general, this question was poorly answered and proved to be the most challenging in the paper. Part (i) was marginally better answered than part (ii). Candidates were comparatively better at identifying items on marketability than profitability in part (i). For part (ii), most candidates were able to identify the increased anti-selection risk, the increased marketability of not having any underwriting and that reviewable rates would make the product less marketable. Few candidates were able to identify the mitigating actions the company would take if no underwriting was performed and the effect of selling more business.*

(i) *Profitability*

The charges need to be sufficient to cover both the expenses and profit margin.

The sensitivity of profit also needs to be considered.

In particular, due to the back-end loaded nature of the charging structure, profits from this contract are likely to accrue later in the policy term giving more risk it will materialize.

If investment performance is poor, the 1% annual management charge may not be sufficient to meet the fixed expenses.

The commission and medical fees are paid for directly and so the profits will be less sensitive to the number of times a customer increases their protection element. However, there are other initial expenses and underwriting costs which need to be covered by the annual management charge and these should be considered.

In particular, the annual charges may be low if the customer does not use this as a savings contract as the funds will be low or ultimately zero. The company should therefore consider allowing for some expense loadings in the protection charges, but this would affect the marketability and competitiveness of the contract.

The sensitivity of the profit to the level of the savings element should be tested.

If up-front costs are high, the profit will be sensitive to higher than expected levels of surrenders at early durations.

The profitability needs to allow for the cost of any reinsurance used by the company.

The level of profitability will depend upon the volumes of business sold.

The profit will be sensitive to the size of the premium if some costs are fixed in nature. The company may want to set a minimum premium to ensure that the value of the management charge is sufficient to cover fixed costs.

The option to increase or take out new protection on a lifestyle change could make the company open to anti-selection, but this is not likely to be an issue if the conditions are strict enough.

The flexibility of the contract could result in more administration costs, which might affect profitability.

Guaranteeing the rates from the effective date does introduce an element of risk which could affect profitability. However, this is no different to rates being guaranteed on level premium business and this may be a risk the company is willing to take.

### *Marketability*

The marketability of the will depend on what the company's competitors are offering.

The contract is very flexible and so should appeal to customers.

The guaranteed annual management charge and the guaranteed mortality charges are also appealing.

The transparency of the charges is likely to appeal to customers as they can see exactly what they are paying for.

In addition, further protection contracts can be taken out without the need for paying for the initial overheads you would usually have to pay for.



However, medical fees and commission payments are expensive and having to pay these directly may make the contract less marketable, even though these charges would be loaded into the contract in some other way, if these were not paid for directly.

This is exaggerated by the fact that high net worth customers will tend to need higher levels of protection, which in turn usually requires more medical tests, which could make the contract less marketable. In addition, if the company is not paying, they may ask for more tests than they would do otherwise.

Since commission is paid directly this may limit the distribution channels open to the company, hence this could reduce marketability.

A restricted choice of funds may not be marketable to high net worth individuals.

Limits on when underwriting free increments may be made on the policy may be too restrictive.

No penalty on surrendering the policy would be a marketable feature.

The level of marketability of the policy will be affected by the size of the high net worth target market.

(ii) *Disadvantages of the suggestion*

No underwriting:

The suggestion could introduce anti-selection risk where applicants in ill health would be able to take out increased life cover. Also, applicants who currently have a clean medical record, but suspect for some reason they may become ill may take out the contract.

Underwriting requirements at the point of sale may need to be stricter, because consideration would have to be taken of the potential sum at risk from future increases as well as for the level applied for on application.

This could both increase costs for the life insurance company and for the applicant making it less attractive for those who only want a small level of cover. This could reduce sales.

The company needs to consider whether the level of risk taken on by this suggestion is acceptable.

The level of reserves would need to increase if no underwriting is performed, since the mortality experience would be expected to worsen.

If the product is reinsured, the company would need to check with the reinsurer before making any changes.

Reviewable rates:

Reviewable rates might make the contract less marketable.

It may also increase systems or administration complexity.

*Advantages*

No underwriting:

The ongoing expenses would reduce because even though medical fees are met directly, there are other underwriting expenses which may not be covered by the annual management charge.

The marketing manager may be correct and the savings could outweigh the cost of the additional risk.

The contract may be more marketable.

Volumes could increase, which would also reduce per policy expenses, the level of further increases in cover would also increase. However, the increase in volume is likely to be mainly due to anti-selection.

A worsening in mortality experience could be mitigated by an increase in standard rate charges offered to new business, but this could mean that the healthy lives go elsewhere leaving the company with even worse experience.

Reviewable rates:

Making the rates reviewable would certainly ease the situation as it would allow any worsening of experience to be charged for.

In addition, the rates quoted could be lower as they do not need to incorporate the same risk margin for potential adverse deviations, which are required for guaranteed rates.

Reviewable rates may lead to lower reserving requirements.

However, there is a limit to how much rates can be increased by as policyholders will have certain expectations.

The level of impact on introducing reviewable mortality rates and no underwriting will also depend upon the practice and reaction of the company's competitors

Overall, it is unlikely that the risks involved would be acceptable.

- 6** *Part (i) was well answered. Part (ii) was poorly answered, with insufficient detail being included and few candidates venturing beyond general comments about profit sensitivity and assessing margins. In part (iii), most candidates considered mortality, however a common mistake was to forget that assumed investment returns are locked in at outset.*

- (i) A model must be valid for the purposes it is being put, it must be rigorous and adequately documented.

Model points must adequately reflect the distribution of the business being modelled.

Parameters used must allow for all those features of the business being modelled that could significantly affect any advice given as a result.

Parameter values should be appropriate to the business being modelled and should take into account the special features of the company and the business environment it is operating in.

The model should allow for any internal consistency of parameters, for example, inflation and asset investment returns.

Outputs should be capable of independent verification for reasonableness and should be communicable to whom advice is given.

The model must not be overly complex, such that results become difficult to interpret or the model becomes too long or expensive to run.

- (ii) Sensitivity analysis may be carried out at an individual policy level and at a portfolio level.

At an individual policy level, sensitivity analysis allows the company to understand the impact of misestimating parameter values in the model.

It can help show what the reductions would be in profits emerging, return on capital or other metrics targeted.

This may help assess what margins may be included in the parameter values for the risk that are not borne out in reality.

At a portfolio level, sensitivity analysis can be used to assess the impact of shifts in mix of business.

Some parts of the portfolio may be more profitable than others and this analysis will highlight the possible impact on overall profitability of the product.

Sensitivity analysis on the volume of business can also be used to assess the overall profits emerging. This may be useful to validate the viability of any

development expenditure associated that may be associated with the pricing exercise.

This can also help the company to understand the possible risk to its capital position if volumes are more than expected.

- (iii) The company is likely to perform sensitivity analysis on its mortality assumptions. The future outgo in respect of the policy is determined by this assumption and variations in it may significantly impact on the profitability of contracts.

This analysis may be split into different aspects including current base mortality experience and improvements in mortality over time.

The company may also consider sensitivities in expenses. Administrative expenses may be relatively low but expense inflation may be important given policies may be in force for a number of years.

Mix of business may also be a factor that needs exploration. Mix across ages and sex may be important if commercial reasons lead to pricing at different levels of profitability across the portfolio.

The sensitivity of profit to new business volumes may also be tested, as might changes in average case size, since both may impact on the company's ability to cover expenses.

The company is unlikely to look at investment returns over time as investments are locked in once the policy is sold, unless the company has made a strategic decision to invest in non-bond assets to back the liabilities. A more relevant factor to investigate would be changes in the yield on the investment used to match the annuity payment if mismatching is employed.

Profits on such contracts may be particularly sensitive to small changes in yields, if these are not automatically reflected in changes in annuity terms given.

In addition the company may wish to look at the potential impact of increases in defaults in its Corporate Bonds, particularly if companies with lower credit ratings are used.

- 7** *The question was reasonably well answered with part (i) proving less challenging than part (ii). In part (ii), whilst expense risk was well covered, investment risk was not very well covered and few candidates considered the potential mitigating action of reducing bonuses. Capital risk was only covered by a few candidates.*

- (i) The advantages of this product for a young couple who have just had their first child are:

The product provides both a benefit on the death of a parent and benefits when the child is a teenager and hence offers a good mix of savings and protection benefits.

The product provides staggered lump sum benefits, which can be used to pay for education fees at key ages during a child's secondary and tertiary education. The parents will be able to use the lump sums to meet expenses such as private school/college and university fees, board/lodging fees at university, school trips, and private tuition.

They could equally use it for other things, to improve the family's financial security, such as paying off a home loan.

The final benefit payable at duration 20, which includes all of the accumulated bonuses and final bonus, is likely to be a fairly large sum (compared to the payouts at duration 14, 16 and 18) and could be used, for example, to pay off any debts that the child has accrued whilst at university, or to provide a deposit for the child's first property (either buying or renting).

The product also provides life insurance cover in the event that the parent taking out the policy dies during the policy term, which will be useful in providing some financial security for the child in the event of the early death of the parent.

The fact that future premiums are waived in the event of the parent's death is an added advantage since it means that the policy will still provide the lump sum series of payments during the child's secondary and tertiary education, even if a death benefit has already been paid out.

It is possible that there will be some tax advantages to the parent taking out this policy, either the premiums payable throughout the policy term may be deductible from taxable income, i.e. income tax relief will be received on the premiums, or the final maturity/death benefit may be paid free of income tax.

The product is regular premium and with profits, meaning that the parent taking out the policy starts saving regularly, the product introduces a savings habit, which may not currently be there. Also the parent benefits from receiving smoothed investment returns during the term of the policy.

Whilst we are not told the investment strategy of the with profits fund it is likely that the with profits fund will be invested, to some degree, in equities and hence will provide a positive real rate of investment return over the long

term in excess of that which could be earned by investing in less aggressive investments, for example, in a bank/building society deposit account.

A policy written on a single life basis will be cheaper than one written on a joint life first death basis.

The disadvantages of this product are as follows:

Since the product combines both protection and savings elements it is likely to be relatively expensive, certainly much more expensive than if the parent just took out term assurance.

We are told that the couple are young and have just had their first child, hence they are unlikely to have a high level of disposable income to spend on a savings policy and a term assurance may be more suited to their budget.

The product is only to be taken out by one of the parents and hence only provides life insurance cover for the parent taking out the policy. In addition the future benefits are no longer received if the child were to die

Even though they have had a child, it is likely that the couple need life insurance to cover both parents; either both parents will work, or in the event that one of the parents stays at home to care for the child, in the event of their death, life insurance cover would be useful to provide money to pay for childcare.

The product invests in a with profits fund. The couple may not like the lack of transparency associated with investing in a with profits fund and they may prefer to invest in, say, a unit-linked contract, instead.

Similarly, a with profits savings policy from an insurance company may be seen as an expensive option, due to the high charges that the insurance company may take, and the couple may prefer to take, for example, a joint life term assurance policy, and invest regularly in a different savings vehicle such as unit funds/mutual funds.

The pattern of benefits offered may not match the needs of the parents, for example, they may need a regular payout each year between ages 11 and 16 for the product to meet regular school fees. The product could be made more attractive if the parent had some choice at outset regarding the pattern of benefit payouts.

Inflation may erode the value of the fixed interim payments to the policyholder.

No surrender in the first two years will mean that the policyholder will not be able to recover any value from the premiums paid in, if their financial circumstances change.

Due to the likely high premiums, the couple may find it difficult to maintain paying the premiums if their joint income falls substantially, for example, if one of them falls sick or has a serious accident. The product might be more attractive if it were to offer rider benefits to cover such eventualities.

- (ii) The risks that the insurance company must consider in launching this contract include:

**Investment risk**

This is a savings contract and hence the main risk is that the product fails to meet the levels of investment return expected by the policyholder.

Investors will expect a reasonable level of real return, in the form of regular and terminal bonuses, throughout the term of the policy. They may compare the regular bonuses received during the policy term to investment returns on bank deposits or on savings in unit trusts/mutual funds.

The company must invest in assets that will maximise the returns to the policyholders for an acceptable level of investment risk in accordance with the way the insurance company's with profits fund is marketed and was described to the policyholder at inception.

The insurer will have to take into account any local regulations, which may govern the asset classes that the insurer may invest the with profits fund in.

In addition the profile of guarantees and payouts may influence the investment strategy and constrain investment freedom.

There is a risk that the returns on the with profits fund are poor in relation to other insurers' with profit funds and hence, for example, the insurer may struggle to sell this business in sufficient volumes if the insurer has a reputation of providing poor with profits payouts (e.g. measured by surveys in the financial press).

Investment risk can be passed back to policyholders via reduced bonuses, however this will also impact the level of shareholder profits and the future marketability of the product.

The company runs the risk of the return being insufficient to meet the guaranteed benefits on the policy.

**Mortality risk**

Whilst the product is a mixture of savings and protection, death benefits are provided and hence there is a mortality risk to the insurer.

In particular, the death strain on early deaths will be higher than a regular endowment product due to the double benefit provided under the contract of

both payout of the sum assured and the provision of the maturity proceeds, with waiver of premium.

The insurer is exposed to the risk of deaths early in the policy term, when the death benefit will far exceed the policy's asset share.

The insurer will usually try to minimise this risk through appropriate underwriting.

The insurer will deduct mortality charges from the asset share of each policy to pay for the mortality risk that the policy represents.

If the insurer reinsures the mortality risk, it will be exposed to the risk of the reinsurer defaulting.

Apart from early deaths, the risks to the insurer are:

- (a) at a portfolio level, that there are generally more deaths than expected such that the mortality charges taken in aggregate are insufficient to meet the death benefits paid out in excess of asset shares.
- (b) that policyholders generally die earlier than expected, meaning that, under the waiver of premium benefit, the premiums are paid by the insurance company for a longer period than expected i.e. the company has underestimated the cost of providing the waiver of premium benefit.

If child mortality has been allowed for, the company is at risk from fewer child deaths than allowed for in the pricing assumptions.

Mortality can be passed back to policyholders via reduced bonuses, however this will also impact the level of shareholder profits and the future marketability of the product.

### **Lapses and surrenders risk**

We are told that no surrender value is payable during the first two years of the policy term. During the first two years, the asset share is likely to be negative, due to the high initial expenses of setting up the policy and paying commission etc.

Hence, even though no surrender value is to be paid out during this period, there is still a risk of higher than anticipated early surrenders/lapses, since the asset share is negative during this period and the company will make higher losses than expected if early surrender rates are higher than anticipated.

Profits are likely to arise for shareholders as a proportion of the regular bonus declaration each year. Hence more surrenders than expected will lead to a lower volume of in-force business and a lower stream of profits for the shareholder.



Some lapse risk may be passed on to the customer through lower bonuses.

At later durations, the level of risk depends upon the relationship between the asset share and the surrender value.

### **Capital risk**

It is likely that it will take significant amounts of capital to write this line of business since new business strain is likely to be present during the initial years of the contract.

The company is likely to deduct from asset shares a charge for the use of capital.

There is a risk that this charge is set too low to adequately compensate the other with profits policyholders, if the free estate in the with profits fund is used to provide the capital support.

If additional capital is required to be provided by shareholders to support the free assets in the with profits fund to allow the writing of this business, then it may be that the capital charge is set too low to adequately compensate the shareholder for this use of their capital.

There is also a risk that the shareholders may not be willing to support the with profits fund in this way given that they are likely to get their profits back through, for example, a 90/10 gate.

There is also an opportunity cost risk, in that the capital required may be better utilised for some other purpose, for example, launching a different product line (that is not so capital intensive), developing an alternative distribution channel and so on, that may produce greater investment returns.

### **Expense and volume risk**

There is a risk that the company underestimates the expenses (both development and regular ongoing expenses) that it incurs to administer the policy and that have been loaded into the premium charged.

In deriving the expense assumptions, the insurance company will have made assumptions regarding the likely volume of new business that will be written as a result of launching this product.

If the company writes less business than expected, then the company may not recoup the development costs that it has sunk into launching this product.

Again, to an extent, expense risk may be passed on to customers through the bonus structure.

If the company writes more business than expected then there are two risks. Firstly, the company may not have sufficient capital to support the writing of

so much new with profits business. Secondly, the company's systems and operational staff may find it difficult to cope, causing backlogs and complaints in respect of issuing policies.

There is a risk of a change in the mix of business being different to that assumed in the pricing, leading to an incorrect expense loading, for example, premium size.

The inflation assumption used in pricing may have been insufficient resulting in expenses growing at a faster rate than assumed.

### **Marketing and competition risk**

There is a risk that the company may market or sell the product inappropriately through certain distribution channels. For example, if the product is sold through a direct agency force, the agents may exaggerate the likely returns on the product to potential policyholders to secure a sale. Hence there is the risk of a mis-selling scandal in the making.

There is a risk that the product may look uncompetitive when compared to with profits products being offered by the insurance company's competitors. This could be due to the benefits offered for a given premium, the type of riders that might be available, or just generally poorer investment performance resulting in lower bonuses and final payouts to policyholders.

There is also a risk that the product may appear expensive when compared to other investment options, for example, investing in unit trusts and taking out a term assurance policy to provide the death benefit.

Even if this product proves attractive, competitors may quickly copy it or improve the attractiveness of their features thus reducing sales potential.

There is a risk that the company has mis-read the demand in the market and that either there is no demand for the product, or there is demand, but for a different type of product, for example, a unit-linked version rather than a with profits version.

There is a risk that the product is too complex and hence it will be difficult to train the sales force selling the product and difficult for them to sell/explain the product to potential customers.

There may be a reputational risk to the company of ceasing the policy in the event of the child's death.

### **Administration / Systems issues**

There is a risk that the company underestimates the level of IT development work required to amend the insurer's IT systems to be able to cope with the administration of this product.

This is especially the case if this is the first time that the company has launched a product that offers multiple benefit payouts, since this may require complex system changes to cope with this.

If the systems take much longer to amend than expected, it may result in a delayed launch for the product, which may be harmful if the company has announced its intention to launch the product.

If administration staff are not adequately trained on the product features customers may be misled.

In addition, fraud is possible, for example, if the company is not notified of the death of the child.

Other potential risks include:

- changes to the tax or regulatory regimes
- concentration or aggregation of risk
- general system, data or control failures

## **END OF EXAMINERS' REPORT**