November 2017

Subject F202 — Life Insurance

Specialist Applications

EXAMINER'S REPORT

QUESTION 1

A proprietary life insurance company sold endowment assurance products with funds invested and managed in one of three separate traditional conventional with profit funds. The funds all use the additions to benefits method of surplus distribution but have different approaches to determining the rates of annual and final bonuses. All the funds are closed to new business, but there are still many active policies in each of the funds.

It has been suggested that these funds be merged into a single conventional with profit fund. After the merger, it is proposed that a consistent approach to declaring future bonuses be followed for all policies. You have been asked to look into the viability of this suggestion.

(i) List the Treating Customers Fairly outcomes that should be demonstrated and highlight other legislation, regulatory requirements and guidance that should be considered as part of the proposed merge.

This question was bookwork and generally well answered by most candidates.

<u>The Treating Customers Fairly outcomes that should be demonstrated are as follows:</u>

Outcome 1: Customers are confident that they are dealing with firms where the fair treatment of customers is central to the firm’s culture.

Outcome 2: Products and services marketed and sold in the retail market are designed to meet the needs of identified customer groups and are targeted accordingly. (This outcome applies to new business only and as such would not apply in this scenario)

Outcome 3: Customers are given clear information and are kept appropriately informed before, during and after the time of contracting.

Outcome 4: Where customers receive advice, the advice is suitable and takes account of their circumstances.

Outcome 5: Customers are provided with products that perform as firms have led them to expect, and the associated service is both of an acceptable standard and what they have been led to expect.

Outcome 6: Customers do not face unreasonable post-sale barriers to change products, switch provider, submit a claim, or make a complaint.

<u>Other legislative and regulatory requirements that are applicable to with profit business are the following:</u>

Long Term Insurance Act, Section 46 requiring policies to be actuarially sound

A long-term insurer shall not:

award a bonus or similar benefit to a policyholder unless:

- it is done in accordance with the principles and practices of financial management of the long-term insurer; and
- the statutory actuary is satisfied that it is actuarially sound and that a surplus is available for that purpose.

For the purposes of the above, 'principles and practices of financial management' means a statement approved by the board of directors of the long-term insurer setting out the discretion retained by the board of directors and the parameters within which that discretion must be exercised in respect of long-term policies where the long-term insurer has to exercise its discretion in awarding a bonus or similar benefit.

BN 158, 27 (1) (d) BN 158 requires the Actuarial function to express an opinion on the actuarial soundness of premiums, benefits, and any other values thereof, including the awarding of bonuses to policyholders.

SAP 104, with regard to valuation of participating business.

APN 107 on the assumptions to use in Embedded Value calculations for participating business in Embedded Value calculations.

APN 103, related to the report by the Statutory Actuary and what should be included (e.g. related to Policyholders Reasonable Expectations and the Bonus Smoothing Reserve)

APN106, regarding the role of the Statutory Actuary in the recommendation, approval and declaration of bonuses.

(ii) Discuss the viability of the suggestion by considering the following:

a) comparison of the possible future bonus distribution methodologies;

b) factors influencing the bonus decisions;

c) Treating Customers Fairly and Policyholders Benefit Expectations;

d) operational and financial impact;

e) and the nature of the products and their features.

This question was reasonably answered. The candidates that scored well were able to generate both a broad range of points as well as sufficient detail within this range. Many candidates failed to touch on one (or more) of the important issues such as PPFM, Asset Shares, Solvency etc. and as such did not generate the necessary detail for those issues.

Comparison of the Bonus distribution methodologies

The Principles and Practices of Financial Management (PPFM) needs to be reviewed. This will determine whether there are any restrictions, limitations and conditions with regards to bonus declarations and fund management practices that will prohibit the merger of the funds.

The PPFM will include :

- The nature and extent of the discretion that is used in determining bonuses
- the factors that are taken into account when deciding on bonus declarations
- how the underlying assets are to be invested.

The PPFM will have to be updated to represent the new proposed bonus philosophy.

Similarly, the policy contracts, investment options and any other documentation should be reviewed to ensure that the proposed change is not in contravention of any of these documents.

The distribution method of the three funds may differ and may also be different to the intended methodology of the new merged fund.

Bonuses can be distributed using a simple uniform, compound or super compound distribution method (which distributes more surplus towards the end of the policy term), based on Sum Assured and/or premiums.

The relative sizes of the declared bonuses and the Sum Assured (or paid premium) should be considered in determining an appropriate distribution strategy going forward, e.g. would the current proportion of declared bonuses lend itself to a Super Compound bonuses structure going forward?

The change to a new methodology will have an impact on the timing of the shareholders' transfers. On the one hand, shareholders may want earlier distribution of surpluses to take advantage of other opportunities, or they may want to delay distribution to provide investment freedom to maximise future allocation and transfer of surpluses.

Compare the shareholders transfer approaches between the funds, e.g. do all the shareholder's share in 10% of the cost of bonuses in the same way. The proportion allocated to policyholders can't be reduced, but it could be increased to achieve consistency between the funds.

The approaches to distribute bonuses at death and surrender may not be the same and may differ from the intended approach of the new fund, e.g. whether a guarantee or asset share is paid.

The funds may have different approaches to split bonuses between reversionary and terminal bonus, e.g. lower reversionary bonuses will allow higher terminal bonuses. A consistent approach will have to be decided on that is fair and equitable.

If the terminal bonus distribution methodology is based on the duration since inception and term to maturity, the maturity profile and outstanding term of the different funds should be considered.

Smoothing and pooling:

The smoothing approach to compensate for volatile market returns and fluctuating markets may differ.

Some of the funds may declare reversionary bonuses that closely reflect actual returns, while others may smooth bonus declarations.

Terminal bonuses are usually determined so that a value close to the total asset share is paid out at maturity. However, the terminal bonuses at maturity may also be smoothed to protect the policyholder against volatile markets.

Consider the pooling approaches of the different funds, i.e. pooling between cohorts or between different classes of policyholders. Pooling may continue in the new fund or may have to be based on a more granular asset share calculation to ensure fairness and equity.

Sources of surplus:

The sources of surplus between the funds may differ, e.g. one fund may distribute only investment profits, the other might distribute profits on non-profit business, expense profits etc as well.

There may be differences in the way other sources of surplus are declared, e.g. investment profits may be declared as reversionary bonus over the term of the policy, whereas expense profits may be declared as terminal bonuses to avoid volatility of bonus rates.

Difference in the target markets will influence the risk experience and behaviour of policyholders and, as a result, the distributable surplus.

Factors influencing bonus decisions

Free assets:

A company with a high level of free assets (excess of assets over liabilities, where the liabilities include the BSR) would allow a more aggressive investment strategy.

Bonus Stabilisation Reserve ("BSR"):

The BSR will be an indication of over or under declaration of past bonuses, e.g. as a result of smoothing. A positive BSR will allow more investment freedom and higher future reversionary and terminal bonuses and vice versa.

Compare the level of the BSR of the three funds. Once-off bonuses may be declared on some of the funds to ensure that the funding ratios are consistent after the merger. This will however have other implications on the guarantees, investment freedom, reserves and capital requirements.

If one of the funds or cohorts has a negative BSR there is probably a recovery plan where future bonuses will be lower over the next 3 years to recover the deficit. Consider the implications of this, (e.g. phase in the new fund as the BSR becomes positive)

If there is a negative BSR for a product line or cohort, the recommended reversionary bonus rate for the fund might be higher than would be declared on a standalone basis. Some level of cross subsidy and smoothing between generations and cohorts of business will then be required.

Asset share:

The asset share will indicate what is available for surplus distribution and will influence the reversionary bonus rate, terminal bonus rate and investment strategy decisions.

Typically, the asset share would be the premiums paid, less deductions (shareholder transfers, commission, expenses), plus allocations of miscellaneous profits, all accumulated at suitable rates of investment return, with allowance for any tax payable.

The calculation methodology of the asset share may differ between the funds. Consider how reliable the asset share calculations are and on what level of granularity they were calculated.

Information might not have been available to calculate asset shares on a per-policy level, with notional asset shares calculated for certain product lines or approximate methods used.

Determine how the asset share will be calculated for the new fund and if the necessary information is available, i.e. by class, cohort, or more granular.

The grouping should be appropriate to ensure that the future bonuses per category are fair and equitable.

Investment returns:

Compare the investment mandates and potential investment returns of the funds. The following factors will influence future returns:

The Investment mandate and investment strategy, and benchmark returns. Ensure that the new fund's mandate is compatible with the previous mandates.

What is the matching strategy and the allowed deviations to explore riskier assets to maximise return?

What fund management performance incentives are there for the fund managers when they outperform the benchmark?

The fund management and other fund charges.

Interim bonus rates: Consider what interim bonus rates were declared as this may affect reasonable benefits expectations (RBE) and have an impact on the next bonus recommendation.

Compare the Bonus Earning capacity of the 3 funds to determine the affordable future reversionary and terminal bonuses rates at the time of the merger.

There may be an inherited estate from some of the existing funds, i.e. where a large fund was built up from under-declarations of previous generations of policyholders. It can be argued that this inherited estate does not belong to the current generation of policyholders as they did not contribute to it. A decision about the inherited estate will have to be made e.g. be allocated to the larger pool of policyholders in the new fund to boost bonuses or support cohorts where the funding level is lower than 100%.

<u>Treating Customers Fairly and Policyholders Benefit Expectations</u>

The conversion from the previous distribution methodologies to the new intended methodology should be equitable and fair.

For a fair distribution of surplus in the new merged fund, benefits should ideally be based on the actual underlying asset shares of the policies on a per policy basis. This might not always be practical.

Investigate the impact of the merger on policyholder's RBE to ascertain whether the policyholders are treated fairly.

For example, a fair approach should be decided on for the following:

- The main factor is the effect on the ultimate benefits at surrender, death and maturity for various cohorts and classes of policies. Consider whether the expected, target or benchmark returns will be achieved in the merged fund to ensure the benefits are not lower than previously indicated or implied.
- The timing of declared bonuses and its impact on early termination benefits, e.g. bonuses declared early in the duration as opposed to later in the duration of the policy.
- Whether the new funds provide the same options as the previous funds in terms of the investment choices and the likely impact of this on investment risk and overall returns.
- The policy conditions, options and features, e.g. ensure that the surrender values are not worse than before.
- With the smoothing and pooling approaches, ensure that different classes and generations of policyholders are treated fairly and equitably.
- Maintain existing and improve future service standards.

Changes to the distribution methodology of bonuses or any other factors that affect the benefits paid to policyholders should be communicated to policyholders in advance and the impact, risks and benefits of these changes should be clearly explained.

<u>Operational and financial impact</u>

The liabilities typically consist of a prospective reserve of guaranteed and discretionary benefits and the BSR, with the total representing the asset share. Even though the total liability should remain largely unchanged, the components might change which will have an impact on the available capital and investment freedom.

The solvency capital required for the new fund may be different to the previous segregated position (e.g. higher capital requirement due to a more risky investment strategy) or result in an increase in the liabilities (e.g. if the new merged fund increases guarantees).

Any changes in the level of declared bonuses or guarantees, bonus philosophy and strength of the BSR will have an impact on the Investment Guarantee Reserves (IGR) and available capital. Changes to the liabilities will result in changes to the required capital and Cost of Capital.

Consider the impact of the merge on Embedded Value. There may be positive impacts as a result of the merger (e.g. reduced fund management fees and administration costs) and negative impacts on the EV (e.g. once off bonuses)

Consider the impact the changes might have on policyholder’s behaviour. Some policyholders may be opposed to the change and surrender their policies earlier. The new surrender basis is therefore pertinent as it will affect available surpluses to remaining policyholders.

Since the new fund will have a consistent approach to declaring bonuses, one of the advantages will be the lower administration costs which will result in reduced per policy expenses. The system requirements will also be simpler.

The Administration system will have to be upgraded to accommodate the dynamics and features of the new fund. Systems that had to deal with the management of the multiple with profit funds previously might become obsolete.

Upgrade or changes to the data storage and data checking processes will need to be made.

Any internal consistency checks that are done between different sources of information (accounting vs. actuarial) will need to be updated / amended to allow for the dynamics of the new fund.

Nature of products and Product Features

Compare the underlying product features of the products to consider what the impact is on the management of these policies going forward and how it affects future bonus declarations.

Where the full earned asset share (where it is greater than zero) is paid out on surrender, no profits or losses will arise on surrender and the effect of surrenders on future bonuses of remaining policies can be ignored.

With the pricing of policies, allowance will be made for a minimum level of bonus as indicated by the Bonus Earning Power. Some classes and cohorts of policyholders paid a higher premium for the same risk benefits to allow higher bonuses. Compare the minimum bonus levels of the products.

Establish whether there are guarantees from the different product lines that should be considered, e.g. absolute minimum bonuses levels, minimum surrender and death benefits.

Consider the options available to policyholders and how this change may impact policyholder’s behaviour and the take up of these options, e.g. option to convert to a pure savings policy, to extend the term without underwriting, or to increase premiums and benefits etc. The new bonus philosophy must be able to accommodate these options.

Altered policies may share differently in future bonuses, e.g. future bonuses are based on a reduced sums assured, while declared bonuses before the alteration were determined on the full sum assured.

Compare the new fund against competitor offerings to determine the likely policyholder behaviour as a result of the merge and whether the new fund is competitive. Offer special conversion terms to retain policyholders that might be considering other products.

Policyholders may have had a wide selection of investment and fund choices that may change after the merger. Consider the likely impact on policyholders, there future bonuses and how this change will be managed.

(iii) Describe the impact on the calculation of regulatory liabilities of conventional with-profit business with the introduction of the Solvency Assessment and Management (SAM) framework.

This question was not answered as well as expected. Many candidates managed some of the bookwork points related to SAM but failed in applying this to the specifics of the question.

Under SAM, there are no planned margins in the liability calculations and all the assumptions are best estimate.

The Technical Provisions also include a risk margin.

Future discretionary benefits need to be allowed for in the technical provisions. Best-estimate future discretionary bonus rates should be based on what the insurer expects to declare, given the with-profits asset pool. Instead of holding an explicit BSR, future assumed bonus rates are increased (where the BSR is positive) or decreased (where the BSR is negative), in line with how management anticipates distributing the BSR.

The calculations need to reflect realistic management actions (for example, dynamic reversionary bonus rates based on a pre-determined formula, provided that these are consistent with the PPFM)

The calculations should also allow for expected policyholder behaviour (for example, levels of withdrawals that vary according to the relative attractiveness of guarantees under different economic conditions).

The Best Estimate Liability (BEL) of with-profits business should not include the value of shareholder transfers in respect of future bonus declarations.

These are not included as a liability, but should be quantified separately for disclosure purposes (to the extent that such transfers relate to future discretionary benefits recognised in the BEL).

When calculating the best-estimate liabilities for businesses that incorporate a discretionary element, the BEL must be calculated separately for the guaranteed (including declared bonuses) and future discretionary benefits (expected but not yet guaranteed). A stochastic calculation may be suitable for the latter.

QUESTION 2

A South African life insurance company sells a mixture of unit-linked and conventional contracts (both with profits and without profits). The company is considering setting up a new life insurance subsidiary in an under-developed African market. The South African parent company plans to model the potential financial outcome of the new subsidiary.

(i) State the objectives of the financial projection modelling that the company would perform to determine whether it should proceed.

This question was reasonably well answered by most candidates. Candidates either understood the objectives or they didn't.

Project the initial (and subsequent) injections of capital required to launch the new operation.

Determine the payback period over which the initial capital injections will be returned.

Determine the likely profit stream from the venture.

Determine the expected return on capital when setting up the new company.

(ii) Describe the investigations the company will undertake, and the process it will follow, to set the assumptions and prepare the model required for the financial projections. When describing these investigations and process consider:

a) the insurance market;
b) the insurance regulations;
c) distribution, human resources and systems;
d) expenses and the economic environment;
e) and any other factors to be taken into account when performing the financial projections.

This question was poorly answered by many candidates. Many candidates did not provide sufficient detail to display understanding of the issues at hand. Candidates missed what seemed like easy points related to the how the products would relate to the new market or the regulatory restrictions that might need to be overcome for example. Many students spent a lot of time explaining the process of each detailed assumption to be set rather than how the above items would play into the assumption setting process.

Insurance Market

Firstly the company will need to assess the extent of the market opportunity presented by the African operation.

A detailed assessment of the whole market in the African territory will have to be carried out. In particular, market segmentation by, for example, location, annual income, propensity to purchase life insurance products and so on will be carried out.

The company will need to make some early assumptions regarding:

- the types of contracts it may wish to launch,
- the target market it wants to aim for and
- its geographical location.

Since the market is under-developed, simple products may be preferable.

In considering the products to sell, the company will want to take into account the demographics of the country i.e.

- are there significant risks relating to particular diseases,
- is the population ageing etc.

The company will need to determine whether markets exist for unit-linked, without-profits, with-profits, or a combination of these.

It will also need to assess the extent to which these products differ from those to which the market is used to and the extent to which it has the knowledge to fully understand the differences.

For unit-linked products past performance will be important. The company does not have this and will have to consider how to solve this problem.

For with-profits products, it will have to understand the degree to which PRE is important and how it differs from South Africa.

These assumptions on products can be amended through an iterative process (for example, if the market segmentation work shows that the market for particular products or income groups is likely to be too small then the company will revisit its early assumptions about the type of products it wishes to sell and will redo its cash flow projections on a new basis).

This will allow the company to derive the size of the market for the products it wants to launch in its chosen target markets.

In doing this it may identify that there are particular product markets that are not well catered for, or conversely where the competition is fierce, which will help the company to form its views on the products it may wish to launch.

The company will then need to do a detailed assessment of the competition that exists for each product type and in each market segment.

The company will need to assess the extent to which customers are loyal to a brand and the extent to which they are willing to purchase from a provider whose parent company is from South Africa.

If there is significant brand loyalty, then it may be very difficult to persuade the consumers in the target market to purchase the new company's products.

This may lead to either slower growth in the early years of the operation or a need for significant spend on advertising and marketing the products in the early years of the operation to build brand awareness.

To mitigate competition and brand concerns, the company may link up with a local partner as part of a joint venture.

Both growth rates and advertising spend are assumptions required for the cash flow model.

The company will also investigate the success of other companies that have set up an operation in the territory concerned, to see if there are any obvious lessons that can be learned (e.g. regarding product mix or distribution strategy).

Insurance Regulatory Environment

The company will want to consider very early on in this process the regulatory environment in which the new company will operate.

In particular, it will need to assess whether there are any significant barriers to entry.

For example:

- the need to hold high amounts of start-up capital,
- particularly stringent reserving requirements (which may make some contracts particularly unattractive to launch),
- barriers on the movement of currency in and out of the country in question or exchange controls,

- the requirement for foreign companies to have a local partner who holds a particular percentage of the equity in the new company. This may be a significant barrier if a suitable partner cannot be found,
- restrictions on the product types which can be sold,
- restrictions on the assets in which it is permissible to invest,
- requirements for the involvement of locals in management,
- restrictions on the distribution channels allowed,
- restrictions on underwriting e.g. genetic tests and use of family history.

The company will have to be sure at this stage that none of these barriers form a serious risk, or if they do, it will have to have a clear plan to mitigate these risks.

The company is also likely to schedule a meeting (or a series of meetings) at this point with the regulator in the African territory to indicate its interest in setting up an operation there.

This will enable the company to establish whether there are any further barriers that it has not yet identified.

The company will also need to consider the extent to which the regulations differ from South Africa and hence :

- the extent to which it will need to hire personnel in the African market, with an understanding for the regulations, and
- the availability of such personnel in the overseas market.
- The cost of employing overseas personnel may be relatively expensive if they are in short supply.

<u>Distribution, human resources and systems</u>

<u>Distribution Channel</u>

The company is likely to have the choice of linking up with another provider who has the distribution capability (e.g. forming a partnership with an established bank that has a branch network) or establishing its own distribution capability.

It may plan to establish its own capability either through direct marketing (e.g. by purchasing databases and then utilising e-mail/internet/smart phone or by advertising in media) or by establishing its own sales force.

The difficulties associated with setting up its own sale force would need to be considered. In particular the company will need to consider:

- who will manage the sales force locally,
- the training it will need to put into place for the sales force (taking into account any regulator requirements re the minimum training, for example, a salesperson may have to receive),
- how it will hire the sales force and
- the extent to which the sales force need a branch network (leasing and management of branch premises etc.)

The distribution channel is likely to impact on the persistency experience of the business.

<u>Staff / Human resources</u>

The company will need to consider the extent to which expertise is available in the local market to set up a new insurance company.

In an under-developed market, it’s unlikely that all of the expertise that the company will require to set up the new operation will be available in the African territory.

The company is likely to need a mixture of personnel from South Africa and the African territory to set up the new operation.

The cost of using South African resources in an under-developed market is likely to be expensive due to the need to pay relocation expenses and higher salaries.

<u>Systems</u>

The company will need to consider the systems it will need for the new operation. In particular it will need to consider the administration system on which all policy data will be kept and the actuarial software that will be used to do the financial projections or to value the policies.

It may be that the company can buy an off-the-shelf package available in the African territory or it may want to use similar software to that used in the South African, for ease of amalgamating results, if this is possible.

The capital costs of any software to be purchased will need to be taken into account in the cash flow model (including the cost of testing this software).

In addition, the software chosen is likely to influence the per policy costs of administering policies, which will need to be taken into account in the expense model and in the pricing of the new products.

Expenses and the economic environment

Expense Model

Using all of the investigations above, the company is likely to develop an expense model that will capture all of the expenses associated with setting up the new operation.

To derive the per policy expenses, assumptions will be made regarding:

- the volumes of business likely to be secured and
- the timing of the launch of each contract type, as well as
- assumptions regarding distribution and
- administration costs discussed above.

Economic assumptions

The company will need to determine all of the economic assumptions required for the cash flow model, in particular regarding investment returns, inflation of expenses and salaries, the risk discount rate to be used and so on.

It will consider the economic climate in the African territory (i.e. the volatility of inflation, interest rates etc. and the stage of the economic cycle) which in turn will feed into the assumptions regarding

- the growth of the target market and
- annual incomes, and
- other assumptions such as withdrawal rates.

The company will need to determine the required rate of return for investing in this territory. Due to the significant risks of setting up a new operation, it's likely that the company will demand a significantly higher return on the capital invested than it demands in South Africa.

The company will determine the risk premium required, which in turn will determine the risk discount rate to be used in the cash flow model.

Other factors to be taken into account when performing the financial projections.

The company will need to consider the assets available in the African territory, and the investment returns that can expected to be earned on each asset class.

It will also need to take into account the investment returns available on other instruments (offered by the competition) in the African territory (e.g. for the products to be attractive they may need to offer rates of return greater than can be earned on bank deposits or by investing directly in mutual funds).

This may help the company to determine the asset mix it needs to hold to support the rates of return it wishes to provide to policyholders.

Where an under-developed insurance market exists, there may also be shortages of asset classes that are widely available in South Africa (e.g. long dated gilts).

- This will impact on the company's ability to match long term liabilities and
- increases the reinvestment risk significantly.
- Again this will influence the asset mix that will be held.

Taxation will also need to be considered; for example, will additional tax need to be paid on profits brought back into the South Africa.

The company will need to decide on appropriate mortality and persistency data for the territory, possibly based on experience in other similar markets if local data is not available.

There will be risks relating to currency volatility which will impact on the return on capital i.e. the return in local terms may not be the same as in ZAR.

- The company needs to consider how to minimise this currency risk.
- The company needs to consider whether reinsurers exist who can accept some of the risk.

The company needs to consider whether there are political risks such as a change in government which could impact on its potential business.

The company needs to consider whether there are any language barriers to overcome.

The company will put all of the assumptions together to produce the estimated cash flows for the new operation, which in turn will demonstrate the capital required to set up the new venture.

Having derived this figure, the company will have to consider alternative uses for the capital to assess whether the venture is the best option available for using the capital and to check that long term profit streams have been maximised.

A without profits non-linked term assurance product pays the sum assured on the diagnosis of one of a specified number of critical illnesses. To maximise the new business volumes, it is proposed that this term assurance product be priced without the overhead expenses included in the expense loadings

(iii) Discuss this proposal, including the risks to the company.

This question was reasonably well answered. The better candidates generated more points.

Reducing the expense assumption will enable the premium to be reduced, thus increasing new business volumes as long as the reduced premium looks competitive.

However, overheads such as management, computer systems etc. have to be covered by the product range as a whole.

But, for this new company, the overheads will probably only be covered when the company reaches a position of scale (i.e. the in-force book has grown sufficiently large to be able to service total overhead expenses).

Eventually, it might be possible to cover all the overheads in the pricing of the other products.

The aim of the company will be to maximise the profit whilst ensuring that its overheads are covered by the whole product range.

If other products are less price sensitive than term assurance then the impact on new business volumes of loading additional overheads into them may be less than for term assurance.

If so, then the increased term assurance new business may result in higher overall profits with the total overheads being covered by the whole product range.

Before doing this, however, the company will need to carefully consider the potential impact on the sales volumes of other products.

It is not always possible to separate overheads and direct expenses exactly so there is a risk that the estimate of direct costs is incorrect.

The office needs to check that it will have sufficient free assets to cope with the new business strain from the increased anticipated volume of term assurance new business.

It will also need to consider whether a significant change in the assumed mix of new business will result in a strain on the anticipated solvency position since different products will generate different new business strains.

If this pricing approach is expected to generate a significant new business volume, the company would also need to ensure that the new business areas can cope with the anticipated term assurance volumes.

This might impact on the quality of the underwriting.

If it adopts this approach, then the company will now be exposed to changes in the anticipated mix of business as well as to changes in the anticipated volume i.e. both aspects will impact on whether total overheads are covered by the product range as a whole, when the company reaches a position of scale.

The company could choose to reduce the overheads loaded into the term assurance expenses per policy (rather than excluding them completely) and hope that the extra anticipated volume of sales results in an increase in the total overheads covered by term assurances as a whole (i.e. maximise [volume * overheads per policy increases])

The impact of the proposal on the portfolio as a whole will depend on how large a proportion of the total portfolio is made up of this product.

END OF EXAMINER'S REPORT