INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

April 2019 Examinations

Subject CP1 – Actuarial Practice

Paper Two

Introduction

The Examiners' Report is written by the Chief Examiner with the aim of helping candidates, both those who are sitting the examination for the first time and using past papers as a revision aid and also those who have previously failed the subject.

The Examiners are charged by Council with examining the published syllabus. The Examiners have access to the Core Reading, which is designed to interpret the syllabus, and will generally base questions around it but are not required to examine the content of Core Reading specifically or exclusively.

For numerical questions the Examiners' preferred approach to the solution is reproduced in this report; other valid approaches are given appropriate credit. For essay-style questions, particularly the open-ended questions in the later subjects, the report may contain more points than the Examiners will expect from a solution that scores full marks.

The report is written based on the legislative and regulatory context pertaining to the date that the examination was set. Candidates should take into account the possibility that circumstances may have changed if using these reports for revision.

Mike Hammer
Chair of the Board of Examiners
July 2019

A. General comments on the *aims of this subject and how it is marked*

1. The aim of the Actuarial Practice subject is that upon successful completion, the candidate should understand strategic concepts in the management of the business activities of financial institutions and programmes, including the processes for management of the various types of risk faced, and be able to analyse the issues and formulate, justify and present plausible and appropriate solutions to business problems.

2. This subject examines applications in practical situations of the core actuarial techniques and concepts. To perform well in this subject requires good general business awareness and the ability to use common sense in the situations posed, as much as learning the content of the core reading. The candidates who perform best learn, understand and apply the principles rather than memorising the core reading.

3. The examiners set questions that look for candidates to apply the principles specific to the situation set out in the questions, having read the question carefully. Many candidates gain few marks by writing around the subject matter of the question in a more general fashion. Detailed specialist knowledge is not required and nor is very detailed development of particular points.

4. Good candidates demonstrate that they have used the planning time well to understand the breadth of the question and to structure their answer – this is a big advantage in making points clearly and without repetition. This also enables candidates to use the later parts of questions to generate ideas for answers to the earlier parts.

5. Time management is important so that candidates give answers to all questions that are roughly proportionate to the number of marks available.

6. The comments that follow the questions concentrate on areas where candidates could have improved their performance. Candidates approaching the subject for the first time are advised to use these points to aid their revision.

7. Candidates who give well-reasoned points, not in the marking schedule, are awarded marks for doing so.

B. General comments on *student performance in this diet of the examination*

This paper was generally well answered compared to previous sessions. The pass mark for CP1 is assessed over the two papers with the pass mark for this session being a combined 58. Paper 1 scored considerably higher than Paper 2, and therefore a score of c53 of Paper 2 was at the overall pass mark for this session.

Question 1 was answered better than Question 2. Many candidates didn't use the information given in the question, examiners believe that using the 45 minutes reading time to ensure that answers are tailored to the scenarios being asked would be incredibly beneficial and indeed the stronger answers were very well structured and pulled out the relevant parts in the question.

Those candidates that used the relevant material scored considerably higher than those that gave bookwork answers.

C. Pass Mark

The Pass Mark for this exam was 58

Solutions

Q1

(i) The current state pension may be insufficient for many citizens. [½]

This may be a particular problem for poorer citizens and those without additional adequate private pension arrangements. There may be paternalistic reasons. [1]

Many of these citizens may be relying on additional state benefits and paying additional state pension may be administratively simpler and could be seen as fairer (since not having to claim for benefits). [1½]

There may be political pressure to increase state pensions or a change in government [½]

Private pension arrangements may not be adequate in many cases. [½]

This may be due to employers reducing their contributions to pension arrangements or closing their defined benefit schemes. It could also be due to employees being unwilling or unable to contribute enough for the level of pension needed. [1½]

The government's efforts to increase private pensions may not have been successful. [½]

[Marks available 6, maximum 4]

(ii) The current pension commitments may be relatively large and could be growing in future. They may be uncertain or volatile. [1½]

This may mean that there is less money available for other activities. This could impact future plans. [1]

This may be a particular problem for the defined benefit pension scheme. Regulations and/or economic conditions may have changed to make this a much larger commitment than expected. [2]

It may be difficult to obtain the additional money needed to fund these commitments. May not be able to increase student fees to fund this and it may be difficult to increase contributions from the employees. [1½]

The university will bear the financial risks of the defined benefit scheme and these risks may be higher than expected. [½]

The reputation of the university may be affected if they are unable to afford their pension commitments. This may make it more difficult to hire new staff. [½]

[Marks available 7, maximum 3]

(iii) For the defined contribution pension scheme the university could reduce the contribution it is making. This may, however, be difficult if other universities are paying higher contributions although it is possible that they may also be reconsidering due to the increase in state pension. [1½]

For the defined benefit pension scheme, the university could consider varying the benefits to make these defined benefits more affordable e.g. by making the scheme career average if it is defined benefit, by reducing the accrual rate, by introducing (or reducing) a maximum number of years of service and/or a maximum pensionable salary. It could also consider raising the retirement age which should fit in with increasing state pension age. It could also consider increasing the members contributions but this may be more difficult if tax rates are expected to rise. [3½]

The defined benefit scheme could be integrated with the new state pension to reduce costs. [½]

The university can consider closing the defined benefit scheme to new members but still keeping it open to existing members or closing the scheme to new members and also to accrual of further benefits for existing members. New employees (and exiting members if scheme is completely closed) would join the defined contribution scheme. [2]

The ease of changing to either of the above arrangements will depend on the pension arrangements available at other universities. It will be much more difficult to change if other universities still offer defined benefit schemes. [1]

If the scheme is closed to new members but still open to existing members the university will still need to make contributions to the defined benefit scheme. There will be a declining number of active members and the contribution rate may become more volatile as the membership reduces. [1]

If the scheme is closed to new members and also to future accrual the existing members will be given reduced benefits at the date of accrual. A one-off settlement would be made but the university would not expect to make further contributions. There are likely to be human resource issues as previously promised benefits have been reduced. The members of the defined benefit scheme may need to be offered a much higher contribution rate to the defined contribution scheme compared to existing members. This could be considered unfair by the existing members of the defined contribution scheme. [3½]

All the options considered will need to be in line with regulation and rules of the scheme. [1]

The strength of any trade unions or employee representation groups will need to be considered. And also, any industrial action which could be taken. This may affect the reputation and finances of the university and make it more difficult to attract and retain staff. [1½]

The university could transfer its defined benefits liabilities to an insurance company. This will reduce risk but will come at a cost. [1]

A lump sum could be offered to individual members to be used to make their own pension arrangements if allowed by legislation in Country A. [1]

[Marks available 17.5, maximum 8]

(iv) Students

There may be a positive impact on students as the expanded university may offer a wider range of courses and have better facilities. [1]

However, this is unlikely to be of benefit to current students due to the time lag. The building works may be an inconvenience. A larger university may not be in line with student expectations as, for example, it may be more impersonal. [1½]

The expansion will be of much more benefit to future students as they will have more choices. Students at the satellite campus may not need to relocate which could reduce their costs. [1]

Employees

There may be a wider range of opportunities available. Would depend if the new focus was on their area of expertise. There may be more work if there are more students to lecture or manage. [1½]

Local city residents/businesses

If the expansion is to the current campus this may put pressure on local accommodation. There may also be more traffic. [1]

It may be positive for local businesses if there are more students spending and/or seeking part time employment. [1]

If expansion is in a different city or a different country then similar points may apply to those above. May also have a positive impact if the university has a good reputation. [1]

Local council

There may be pressure on local housing. [½]

Some additional facilities may be available for the local community (e.g. sports facilities). [½]

Regulator

The regulator of universities would need to ensure that the university could cope with the higher number of students without any loss of quality. They may be concerned if the expansion was in a different city or different country. [1]

Government

They may need to fund more students. [½]

Other stakeholders may be affected e.g. deans, university managers, university owners (need explanation of these). [1]

[Marks available 11.5, maximum 5]

(v) Actuaries could work with the other professionals involved in the project to identify risks involved in the project. [1]

These risks and their interdependencies can then be discussed. [½]

Each risk could be measured. [½]

General mitigation options can be discussed. [½]

Further risks and mitigation options can then be identified. This will again involve other relevant professionals. [½]

The actuary can also be involved with plans for outlining how to finance the project. [½]

The actuary can give more detailed advice relating to risk quantification. Will need to consider the probability of each risk occurring and the expected outcome if it does occur. [1]

A subjective assessment could be made estimating the probability and cost or impact of each risk event on a scale which could be used for ranking the various risks. [1]

A model could also be used. Would need to assign a distribution to both the probability of a risk event occurring and the impact of the risk. Could use a stochastic or deterministic model. Could provide scenario analysis to assess the impact of the expansion using different scenarios. [2]

Financial metrics (e.g. NPV, payback period) could be calculated to assess potential success. [½]

Actuaries could give advice on methods of risk acceptance, rejection, transfer and management for the various risks involved. [½]

The actuarial control cycle could be used. [½]

[Marks available 9, maximum 5]

(vi) The university is likely to consider a range of methods to raise the required finance.

They could issue bonds or take out long-term loans. [½]

Could partner with industry. [½]

Could use any long-term funds the university has available (reserves or endowment funds). [1]

Could raise capital from past students or other methods of fundraising. [½]

Consider if any grants may be available for part of the project e.g. from the government. [½]

Part of the current income (from student fees) could be put towards the project. Tuition fees could be increased. [1]

Future income (e.g. tuition fees) could be securitised. [½]

Could raise equity capital if the university is privately owned. [½]
[Marks available 5, maximum 4]

(vii) There will be risks related to the physical expansion. [½]

The project may run over time or over budget. [1]

Management: The project should be well planned and costed in advance. Action should be taken at the first sign of overrun and increase in costs. A fixed fee could be arranged for some of the work. [2]

There may problems obtaining planning permission or other political problems. [½]

Management: Investigate to see if planning permission has been given for similar projects locally (may not be likely) or in other areas. Could adjust plans if necessary or lobby those with influence. [1]

And again, during the construction phase e.g. with any contractors used, poor weather, natural disasters. [1½]

Management: Investigate background of all contractors, use tight contract wording and/or penalties. Could investigate the condition of the proposed sites, take out insurance for weather, natural disaster risks. [2]

There may be additional problems if the expansion is in a new unfamiliar city. [½]

Management: Local knowledge and expertise may be needed and additional research will need to be conducted. [½]

And additional risks if in a different country, particularly introduction of currency risk and political risks and regulatory risks. [1½]

Management: Additional research relating to the risks in a different country. Could use derivatives to protect against currency risks. [1]

Once the expansion is complete, there is the risk that this does not increase the attraction of the university and does not lead to increased student numbers. It may have no effect on the quality of the university and it may not achieve its aim of becoming a world class university and could even damage their reputation. [1½]

Management: Research position of other universities and what the students they are aiming to attract are looking for in a university. Ensure that high quality infrastructure is matched by high quality staff. Additional marketing may be needed. Will need to keep monitoring their position. [2]

The university may not be able to raise the money needed for the expansion. [½]

Management: They can consult experts and consider the methods outlined in part (vi). Could also consider partnering with another university. [1]

[Marks available 17, maximum 6]

(viii) Property damage for buildings [½]
Contents cover which may include cover for works of art/library/scientific equipment/sports facilities [1½]
Motor insurance if vehicles being used for university purposes. [½]
Business interruption [½]
Employers' liability [½]
Public liability [½]
Professional indemnity [½]
Insurance for staff and students in their role at the university including when travelling abroad [1]
Cyber insurance [½]
Fidelity insurance to protect against fraud from staff [½]
Cover for employees relating to life, sickness and disability [1]

[Marks available 7.5, maximum 4]

(ix) Can provide advice on different types of insurance cover. May be able to provide a more cost-effective alternative for existing products. [1]

Can advise on other employee benefits including flexible benefits. [1]

Can advise on investment strategy for any reserves and any other projects and also on the defined benefit scheme assets. [1]

Can provide advice relating to tuition fee setting. [½]

Can also provide advice on the identification and management of risks. [1]

[Marks available 4.5, maximum 3]

(x) Big data refers to very large data sets of information.

It can be characterised by:

- Very large data sets.
- Data brought together from different sources.
- Data which can be analysed very quickly for real time decision making. [2]

[Marks available 2, maximum 2]

(xi) Big data can include personal data (such as data from social media or loyalty cards). If personal data is held by an organisation, then the organisation needs to comply with the relevant data protection rules. Given the large amount of information that could be held on an individual, privacy considerations are likely to be a concern for individuals whose data is held. [1½]

There may be challenges collecting data from many different sources and analysing them. There may also be difficulties with data storage and/or computer power. [1]

It may be difficult to pick up any errors or missed data. [½]

Anonymization can potentially aid big data analytics. It also enables organisations to give an assurance to the people whose data was collected that they are not using data that identifies them for big data analytics. [1]

A key feature of big data is using 'all' the data, which contrasts with the concept of data minimisation in the data protection principles. This raises questions about whether big data is excessive, while the variety of data sources often used in big data analytics may also prompt questions over whether the personal information being used is relevant. Organisations need to be clear from the outset what they expect to learn or be able to achieve by processing the data, as well as satisfying themselves that the data is relevant and not excessive. [2]

Need to ensure that data is ethically and fairly used and complies with all regulation. [½]

Data governance is becoming increasingly important for holders of big data. [½]
[Marks available 7, maximum 3]

(xi) Big data can be used to monitor student performance and attendance (but not on an individual level) [1]

to check which areas are working and to identify problem areas [1]

e.g types of students, courses, modules, methods of assessment. [1]

This should ensure the university can keep their current students (reduce drop outs) [½]
and increase future student numbers. [½]

Should also enable them to increase student satisfaction [½]

And identify the best quality courses. [½]

It can be used for marketing purposes [½]

This should help them achieve financial and academic success. [½]

It can also be used for academic research. [½]

[Marks available 6.5, maximum 3]

Those candidates that planned their answers using the information provided in the question scored well. Those candidates that didn't use the information often missed out on the easier marks available.

(i) Few candidates scored well on this part with most candidates not going into sufficient breadth of the marks available, Few candidates considered private provision at all and even fewer considered employer schemes.
(ii) This part was generally well answered with most candidates coming up with sufficient points to pick up the marks available
(iii) This was well answered with most candidates picking up the various options.
(iv) The stronger candidates considered all stakeholders and then went into sufficient detail to score well. The weaker answers did not go into sufficient breadth to score full marks.
(v) This was poorly answered with few candidates focused on risk and how it could be managed. This was a surprise to examiners.
(vi) Well answered with most candidates thinking of a number of options
(vii) Very well answered with credit being given to suitable answers and mitigations
(viii) Again well answered
(ix) This was poorly answered with few candidates being able to think of more than 1 or 2 things.
(x) Those that knew this part of the course scored well
(xi) This was generally well answered but linked to (ix) in that this was either misunderstood or poorly answered
(xii) *Candidates did poorly on this with few considering how to use big data other than one or two ideas.*

Q2

(i) There may be short term economic concerns. If savings are too low, spending is likely to be higher. This may lead to too-high economic growth and/or inflation in the short term. [1½]

Generally thought that low levels of savings would result in a unbalanced/unstable economy, too reliant on spending. The government may wish to avoid the negative consequences of such an economy:

- too much build up of personal debt
- possible current account deficit (imports>exports)
- unstable economic growth [2]

Longer term there may be a wish to stimulate investment in the economy. Ultimately personal savings form the foundation of Institutional or business investments. Built up savings can therefore, in turn, be invested. A greater range of government projects eg infrastructure can then be undertaken. Investment in turn should lead to economic growth. (Circular flow of income effect.) Increasingly important for investment to be made eg in new technology/automations, or to deal with shifting trends eg ageing population. Alternatively, Institutional investment may simply be increased into government bonds, avoiding bond yields having to rise so much. High levels of personal savings help keep real interest rates low, and this in turn can further stimulate investment. Similarly, businesses may be able to invest more so as to increase productivity. [5]

There may be other financial reasons. If people save for themselves, the government may be able to cut back on spending, particularly in the medium to longer term. For example, government social security/housing/medical/long term care/pension benefits may be reduced. *(Marks limited to 1 egs here.)* Often deposits are needed to either buy or rent a property to live in. [2]

There may be purely paternalistic reasons eg better society if people have at least some level of savings for emergencies. If people are less stressed by only managing to meet their day to day bills via borrowing/credit. The economy may be heading for lower growth or recession. The government wants people to get prepared for leaner times ahead by saving more now. [2½]

There may be tax reasons eg want to raise more taxes from savings. [1]

The government may have made election promises/targets to increase personal savings. [½]

[Marks available 14.5, maximum 7]

(ii) Incentives will be needed for both savers and the company offering the product. [1]

Incentives will be directed towards:

- starting a savings plan
- maintaining regular contributions
- increasing contributions
- not cashing in plans (duration of savings likely to be medium/long term, but depends on government objectives).

A range of specific incentives could be tried:

(Give marks for any convincing examples here, plus related discussion, including but not limited to the below. Examples do not need to be correlated to the above broad categories for marks to be awarded. But please make sure the above marks are given if the above aspects are mentioned in the examples/discussion given.)

Where people are employed, require employers to offer a savings product. Then opt employees in/auto enrolment. [2½]

Provide a government safety/solvency net for these savings products eg protect savings, up to a financial limit, the same as if they were protected in a bank. [2]

Offer tax incentives to ensure saving is attractive to individuals. Tax relief on contributions made by the individual or a third party on their behalf (e.g. partner, employer), tax-free investment returns, tax-free payouts. Unlikely to offer all three – mix of these incentives will depend on how long term the government wants the savings to be, and if some types of investor are to be targeted more than others.
For low income savers, tax incentives will be ineffective (as likely to not pay any tax). Instead, offering to shield the savings when being assessed for means tested benefits likely more effective. [4½]

Offer government top ups to the accounts eg initial lump sum paid in by government, matching regular contributions, top up at exit. These accounts could be for stated purposes the government wishes to encourage eg educational, house purchase, starting own business. Likely to be constraints to limit cost/abuse. Top ups could be designed as loyalty bonuses at appropriate durations to align with government objectives. [3½]

It may be possible to reach a cross-party agreement to unsure confidence in the scheme. This could guarantee the stability of the scheme/incentives over the long term eg 30 years eg flat guaranteed tax relief rates, no increases to the 0.75% cap over that time. [2]

The government could launch communication/education initiatives to explain to citizens the importance and benefits of savings. They could offer free advice/information/intervention and review services eg simple projection tools that explain you need to save £x per month now if you want to get £y in z years' time. [2]

The government give preferred provider status to companies meeting certain standards. They could guarantee the company a preferred provider status for minimum x years, subject to satisfactory performance indicators eg investment returns/financial strength. This should make it easier for suitable companies to market their products. [2]

The government could offer a guaranteed minimum return on savings. This should increase the attraction of the product particularly to less sophisticated savers. [1]

Regulation could be simplified and/or cooling periods introduced, literature simplified. This should give confidence to potential buyers. [1½]

(further convincing example: 1 for the example, plus 0.5 mark for each distinct part-elaboration about it, max 1 for elaborations).

[Marks available 24.5, maximum 7]

(iii) The government wishes to attract a complete spectrum of savers, and also this company's product is only one of a wide possible range that would be available. [1]

A unit-linked approach is relatively complicated compared with the overall range of savings products. If the marketing literature does not simplify the unit-linked concept it will likely alienate large sections of potential savers, in particular the less financially sophisticated. The likely volumes of business, and resulting profitability, would then be reduced, particularly as there is the potential to attract very large numbers of less sophisticated policyholders. And it is likely that such policyholders are the ones that the government are particularly trying to entice to save. [4]

A unit-linked approach also offers flexibility, particularly in the choice of a range of investment funds. Some funds will be more risky than others, and if a choice of funds is offered these risks must be clearly explained to prospective savers. It is unlikely that less sophisticated policyholders will want to take any/much risk with their savings. Indeed, beginning to offer choice of funds may again complicate the marketing message and alienate more unsophisticated savers. [2½]

Therefore the marketing literature is likely to be significantly different between different sections of the target market of savers. At least two styles of product would likely be marketed: [1½]

a) For less sophisticated savers, a simplified or basic product or a default fund. The explanation of this product will need to be relatively simple. It is likely to be based on a deposit/interest roll up type fund only, with little or no mention of any other available funds or related switching/redirection options. [3]

b) For more sophisticated savers, a fully-fledged unit-linked product explaining the concept of units and prices. The explanation of this product will be much more detailed and will be aimed at a different level. The product is likely to have a wide range of available funds and will offer switching/redirection options. The marketing literature here would need to explain the trade off between risks and potential higher yields. [3]

For (A), with careful wording, and in collaboration with the regulator, it may be possible to avoid marketing (A) as being unit-linked at all. If the company is guaranteeing that unit prices cannot fall in a deposit type fund, then no misrepresentation of the unit-linked concept would occur. In other words, treating customers fairly regulations could be achieved with such an approach, even though the company would still administer the product in a unit-linked fashion. [3]

All literature should be accurate, fair, clear and not misleading. [½]

Some savers' sophistication/financial means/risk appetite will naturally be somewhere between (A) and (B) styles of product. One approach may be to add a small section to (A)'s literature to signpost the possibility of another product (B) being available with the company eg stocks and shares based, but where you could lose, rather than gain, money. [2]

[Marks available 20.5, maximum 8]

(iv) The idea of a charges cap is helpful to policyholders in the sense of giving them more confidence to save. Their chances of being "ripped off" by profit-seeking private companies is reduced. Small differences in charges can have a major/compounding impact on a savings pot by the time someone disinvests. [1½]

Whether 0.75% is appropriate is another matter. The cap should probably discriminate by type of fund eg a simple deposit type fund should cost less, in investment costs, to run than a more equity/property based fund. However, costs of collecting premiums should also be considered which might be fixed in money terms rather than % of fund based. This might mean that a common cap across all funds looks more reasonable. Larger, or less frequently-contributing savers could be cross subsidising smaller investors. [3]

A charge cap has the benefit of being simple to understand, appealing to savers, and measurable in advance. But it can also have some drawbacks from more sophisticated savers' point of view. It is only one part of a more complex assessment of overall value for money. Other aspects need to be considered, notably investment returns and quality of customer service. [2½]

All providers could charge the maximum of 0.75%. Alternatively, competition may r educe the rate so that it is too low. This may adversely affect the customer service. [1½]

More sophisticated savers, for instance, might be interested in the idea that they could potentially get, say, 1% extra investment return a year by paying 0.5% instead of 0.75%. The charge cap will, subject to competitive pressures, restrict the ability of savers to access the best investment managers or certain assets. Also (whatever calibre of investment manager) passive/tracking investments may be made rather than potentially higher yielding active/innovative strategies. [3]

Similarly, savers will value customer service, although unclear how much they are willing to pay for this. But high sophistication policyholders would value more complex/expensive services eg online reprojection tools. [1½]

Savers may not understand the charge particularly as simple products on offer from competitors may not have this charge. [½]

[Marks available 13.5, maximum 5]

(v) Charges will need to be disclosed at appropriate times, and in a clear way, allowing for financial sophistication. [1½]

Timings should be prior/at inception, regularly through policy's life, if any change to charge rate occurs (still staying within cap), and on disinvesting any money. More sophisticated savers may require the information on demand or at any time. [2½]

The charges could be disclosed in the marketing literature. They could be disclosed in statements to policyholders e.g. annual statement or if any change to the rate occurs. They could be available on the company website [1½]

As well as actual charges, the compounding effect of them over time could be disclosed, as this will probably be of more interest to savers. Eg could show projections over 5, 0.50, 10 years etc. [1]

The style of communication should also follow marketing literature approach as discussed in (iii) above. [½]

For less financially sophisticated policyholders/design (A), a simple explanation of the percentage reduction to the interest rate added is likely to be sufficient, with no explicit mention of "charges."
With this category, there is evidence to suggest that people do not understand percentages. And where percentages are understood, there is still the issue that charges can appear small in percentage terms but have a large cumulative impact. More effective disclosure would be to convert the effect of charges into money amount terms. To be particularly effective, such disclosures would need to be tailored to the actual amounts invested by each saver. [3]

Some explanation of the reasons/uses for charges would increase effectiveness of the disclosures. All savers would probably appreciate a brief outline of investment and transaction costs. For more financially sophisticated policyholders, disclosures could be accompanied by a longer commentary based around the overall value for money aspects discussed in (iv) above. [2]

[Marks available 12, maximum 4]

(vi) *As usual, give cross-credit where appropriate. Many of the risks, discussion points are inter-related.*

Risk of expenses exceeding charges, and losses being made. This risk is higher than otherwise because of the charges cap. [1]

Risk, although expenses don't exceed charges, that the difference is less than assumed when profitability was assessed. [½]

Risk of mismatch between charges and expenses. % charge may match investment costs, but general admin costs, and particularly transaction/premium collection costs may be in money terms. [1½]

Risk of lower than average policy size/premiums so that charges are too low. [1]

Risk of higher than expected frequency of premium payments – exacerbates the above charges risks. [1]

Risk of higher than expected inflation of expenses. [½]

Risk of lower than expected investment performance. Charges will be lower. Ability to recruit and retain policyholders will be reduced. Possible loss of preferred provider status with government. [1½]

Risk of high levels of fund switches/ redirections. No explicit charges possible to cover these. [½]

High business volume risks. Strain on capital … may start to run out. A big issue for this contract as likely to need non unit reserves to cover future excess of expenses over charges. Normally reserves are contract by contract calc ie some small pols definitely need reserves, even if the overall portfolio wouldn't. The charge cap is an increased guarantee risk, so further increases capital required. Similarly a guarantee on the deposit fund price not falling further increases capital.
Administration levels may become too stretched leading to poor publicity for company. [3]

Low business volume risks. Unable to recoup fixed development costs of product, including costs of setting up new funds. High per policy costs result, and these may have to be disclosed. Unable to cover running costs - need to meet critical mass of funds under management for product to break even. [3]

Business volume risks exacerbated because this is a new savings initiative … no track record/historic data available to confidently estimate popularity of idea/take up of this company's policies. Such risks arise from model/parameter/data errors/random fluctuations. Possible to study similar initiatives/data from overseas, but relevance questionable. [2]

Risk that government might withdraw/reduce incentives. Depends on whether cross party support has been gained so as to guarantee them long term. Otherwise, economic/fiscal cycles vary and what was once a savings priority for the government becomes less so in future. Risk that government withdraws preferred provider status to this company. [2]

Risk that govt may drive charge cap lower in future. Or start imposing harsher conditions on providers eg regular/expensive disclosures to policyholders, due diligence exercises expensive to comply with. [1½]

Risk that the savings initiative fails eg public simply don't like the idea of savings, or have something against this particular company or industry eg scandals, adverse PR. [1]

Risks from lower than expected persistency (also mortality/morbidity contribute). Persistency rates always difficult to estimate, but especially here with new product/incentives. Early withdrawals won't cover their initial set up costs, as no up front or exit charges allowed. There will be a very long term payback period. This further increases capital required up front. Incentives may drive withdrawal behaviour eg spot withdrawal of funds after payment of incentive/loyalty bonus. A range of related risks will occur eg economic/unemployment/inflation risks/personal circumstances of policyholder changes. This will affect the need for funds to be withdrawn. But also will affect level of disposable income – risks also of premium reductions; lower than expected prem increases.
At later durations, the idea is that funds will have built up and profits arise from each year the policy continues. So lower than expected late duration persistency will also be a risk. [4]

Liquidity risks eg unexpected economic downturn … harder to get good value for assets, people want their money more, unlikely to be able to delay paying out to savers. [1]

Different risks could all be happening together eg weak economy means poor investment returns and lower job prospects/disposable incomes. [1]

Risks from competitors. Competitor products may be more appealing to customers, or directly try to undercut the charges being levied by this company. Extent of risk again depends on preferred provider status and ability to market a simplified ul product. [1½]

Risks from marketability. The low cost nature of the product means that direct sales is likely, at least for simplified product. This sales channel largely relies on the saver buying, rather than being sold, a policy and therefore low sales volumes are a particular risk. The more complex/flexible product may involve other distribution channels, eg brokers or salesforce, introducing misselling risk. [2]

Risks from new systems/infrastructure. Likely to need at least some new premium collection systems eg to deal with high frequency/small premium transactions. Risk of teething problems, or failures with the new systems. A complete overhaul of these systems to new digital technology may be very costly and risky. Specific risks around data security, systems/network outages. Related risk that such issues could lead to bad publicity or regulatory fines. [3]

Similarly, may be involved with new payment partners, eg online/supermarket/smartphone interfaces. These may have high charges or bring operational risks. [1]

Risk of loss of value from lapse of existing products (and possible re entry in to new product with this or other companies). Where this new product can perform the same role as existing products of the company, it is at risk of lapses on the existing products where their charges are higher than this new product. The extent of the risk depends on whether there are any exit penalties on the existing products, and how they compare with the loss of future profits on exit. Associated risk from complexity/time/expense of having to manage such policyholder activity, which may be large in volume. [2½]

This is a new product so there is a risk of lack of data leading to incorrect assumptions. [½]

There is a misselling risk if the more complex aspects of the product are oversimplified. [½]

General operational risks e.g. fraud, poor customer service, increased regs to deal with. [1]

Risk of adverse changes to tax rates/rules or status. [½]

[Marks available 38.5, maximum 15]

(vii) Issues

Lack of credibility with savers/government or regulator/third party suppliers. [1½]

Inability to demonstrate to government required skills, experience, capital to be granted licence to operate. Will need to be able to produce a convincing business/solvency plan which will be a major time and financial commitment even before being licensed. Similarly, problems of setting up office/systems infrastructure and hiring enough staff. [3]

Lack of investment track record. Some of the investors may intend to be involved as investment managers in the new company. But their performance as investment managers could be intellectual property of their previous employers ie can't use for advertising. Alternative of using third party investment managers could be considered but unlikely to be able to obtain a very good deal starting from a zero funds position. [2]

Could be driven out of market by highly competitive market or predatory behaviour of larger established players. [1]

They may not have enough capital compared to their competitors and there is no possibility of cross subsidy. The returns may not be sufficient. [1]

Opportunities

Not enslaved by the legacy systems inherent in established companies or known for historic problems or a poor reputation. May be able to produce innovative/cheaper/more efficient systems specifically designed with the new savings product in mind. In particular, novel ways of dealing with the collection of small/infrequent premiums. Existing company may face long-term administrative costs of operating dual systems, or be slower to respond to cyber threats, which are continuously/quickly evolving. [3]

A fresh, more nimble approach to investment opportunities may be possible. They may possess novel intellect/ideas. They will not be burdened by the potentially slower/more rigid governance hierarchy of existing company. [1½]

[Marks available 13, maximum 4]

Those candidates that planned their answers using the information provided in the question scored well. Those candidates that didn't use the information often missed out on the easier marks available.

(i) Responses were mixed on this question with stronger candidates considering all possible stakeholders and the knock-on impacts

(ii) Generally well answered by most candidates

(iii) This was very poorly answered with few candidates scoring well. Many candidates only focused on the features of the product rather than considering literature or sections of the audience.

(iv) This was OK but again candidates didn't focus on the specific issues being asked and often focused their answer around one point.
(v) Was answered well
(vi) Those candidates that structured their answers scored well, with the weaker answers not considering a wider range of risk and then did not develop the answers in sufficient depth.
(vii) This was answered reasonably well with the stronger candidates focusing on both the issues and the opportunities.

END OF EXAMINERS' REPORT