

# **INSTITUTE AND FACULTY OF ACTUARIES**

## **EXAMINERS' REPORT**

November 2016

### **Subject CA3 – Communications**

#### **Introduction**

The Examiners' Report is written by the Principal 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.

For the CA3 communications examination the examination is designed to examine the communication of an actuarial concept to a non actuarial audience. Sufficient technical detail on the scenario is provided in the question so that candidates from all backgrounds are able to answer the question.

One approach to a solution is reproduced in this report; other valid approaches were given appropriate credit.

Luke Hatter  
Chairman of the Board of Examiners  
February 2017

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

1. Subject CA3 – Communications consists of two parts as follows:  
  
Part A – Written communication  
Part B – Oral communication
2. The overall objective is to draft communications intended for a non-actuarial person who is usually assumed to have some business knowledge. While it is recognised that some clients, such as Finance Directors or a Trustee Board Chairmen, might be actuaries, many clients will not be.
3. The communication needs to be of a standard that it would be acceptable as a first draft. It is important that the recipient would both understand the communication and be satisfied with the response. The marking schedules include details of the marks awarded for including the necessary content. Marks may also be deducted for including irrelevant content or details that candidates have specifically been asked to exclude from their solution. Further details are provided in this report.

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

**PART A – Written communication**

**Scenario: Memorandum for Marketing Manager**

**PART B – Oral communication**

**Scenario: Sales strategy for life insurance product**

Overall candidates sitting this exam performed less well in the written question than in the presentation question. Further details on student performance for each question are provided in the sections below.

**C. Pass Mark**

The Pass Mark for this exam was 63.

## PART A – Written communication

### Scenario: Memorandum for Marketing Manager

A possible answer is given below. This is not intended to be a model solution. In practice, a wide number of solutions were acceptable and candidates would have achieved good pass standards without having the same level of detail as the answer below.

Candidates were asked to draft a memo for the marketing manager providing some analysis of three proposals for promoting coffee capsule machines.

Candidates were given clear instructions on what the memo should include:

- *“Summarise the results of the research that the analytics team have carried out on the three categories of customer and their buying habits.*
- *Illustrate, for each category, the typical spend for one year, with appropriate commentary; and*
- *Evaluate each of the marketing team’s proposals under the following criteria:*
  - *the value of the proposal to the customer; and*
  - *whether the proposal meets WB’s environmentally friendly non wastage policy.*

*The head of marketing has been impressed by memos in the past that have included tables and charts so please use these where appropriate.*

*Your manager has asked you to be clear on any findings from your analysis.”*

All the information required to answer the question was provided in the question paper.

The main points that the Examiners were looking for and some common problems encountered were as follows:

1. Most candidates produced scripts that looked like a memo suitable for the marketing manager. Scripts gained marks for having a clear introduction clearly explaining what the memo would cover. Poorer scripts didn't have a clear introduction or include clear details on what the three proposals that were being evaluated were.
2. There was little evidence of candidates running out of time and therefore not completing their answer. However, some candidates produced scripts that were much longer than the suggested 600 words. This may indicate that candidates didn't have time to edit their answer. Scripts that were very long tended to be repetitive and include irrelevant information which detracted from the main messages.
3. Candidates were asked to “evaluate each of the marketing team’s proposals under the following criteria:
  - the value of the proposal to the customer; and
  - whether the proposal meets WB’s environmentally friendly non wastage policy.”

Some candidates didn't say how they were evaluating the proposals in their memo. Other candidates just talked in a general manner about benefits to the customers and environmental issues. Better candidates presented their analysis in a systematic way that would be understood by the marketing manager.

4. Candidates were asked to "be clear on any findings from your analysis." Better candidates included a final summary that provided the key points from their evaluation. Weaker candidates provided conclusions that sometimes didn't reflect the findings from their evaluation.
5. Some candidates introduced complications or suggestions that they had explicitly been asked not to include in their response. E.g. they commented that spare coffee capsules may be useful for someone else.
6. Some candidates included far too much unnecessary mathematical detail in their answer. E.g. they provided details on how costs were calculated; tables showing the percentages of the lifetime of the machine used for different groups calculated to several decimal places etc.
7. Most scripts included satisfactory spelling, grammar and punctuation.

## SOLUTION

*The blue notes in this solution are intended to provide an aid to candidates on the key messages that are needed in each section. They do not form part of the solution.*

## MEMO

**To: Marketing Manager**

**From: Name**

**Date: dd/mm/yyyy**

### Analysis of three proposals for WB coffee machine promotion

#### Introduction

I refer to recent correspondence in which you asked us to provide some preliminary analysis on three proposals for promoting WB coffee machines.

I have provided below:

- details of our typical coffee capsule customers; and
- some analysis of how the three proposals meet two key criteria:
  1. it engages with customers; and
  2. it meets WB's environmentally friendly objectives.

#### The three proposals

*(Want clear simple proposals. Candidates should cut down on some of the detail provided in the question.)*

The proposals would be offered with the sale of all new machines.

**Proposal 1:** Three \$25 off vouchers on future purchases of coffee capsules – one voucher per purchase, valid for 1 year.

**Proposal 2:** 200 free coffee capsules (made up of 5 capsules of each of WB 40 different types of coffee capsules with no alternative choice available).

**Proposal 3:** Buy One Get One Free (BOGOF) on new machines.

#### WB coffee capsule customers

*(2 main messages:*

- 1. Three different categories of user – main variant being the number of capsules used per day; and*
- 2. Individuals are fussy about the coffee they drink – they only drink 5 out of 40 WB varieties.)*

Our recent analysis has identified that customers can be split into three main groups according to their level of consumption as set out in the table below.

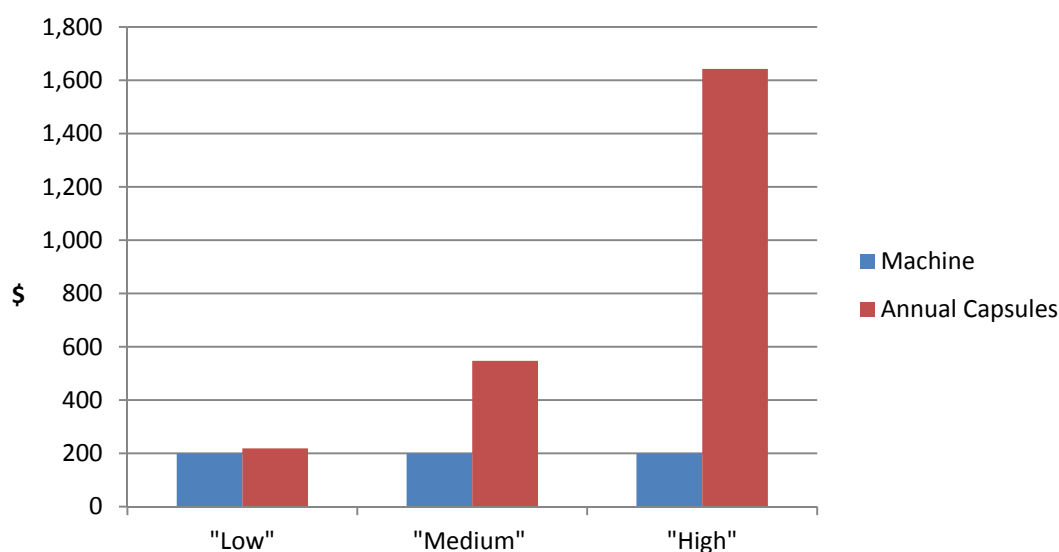
| Group classification | Comprises                              | Average daily number of capsules consumed |
|----------------------|--|---|
| "Low"                | Single person households               | 2   |
| "Medium"             | Two person households                  | 5   |
| "High"               | Larger households and small businesses | 15  |

Analysis also indicates that customers have very particular tastes in coffee capsules, with each individual preferring up to 5 out of the 40 varieties of capsule.

### Yearly spend for new machine buyers

*(Include graph on typical costs over a year, showing coffee capsules is the largest cost for medium and high users. Include appropriate comments to highlight the main messages.)*

The chart below shows the cost of a new machine compared to the total annual cost of coffee capsules for each of the three main types of customer.



For "High" and "Medium" users the annual cost of the coffee capsules is much greater than the cost of the machine. WB coffee machines have a typical lifespan of 5,500 capsules. A new machine is expected to last 1 year for "High" users, 3 years for "Medium" users and more than 7 years for "Low" users.

## Method of analysis of three proposals

*(Include WB's environmental message, plus value to the customer. Want clear comments on both criteria for each proposal.)*

For each proposal I have considered:

1. the potential benefit to the customer; and
2. whether the proposal meets WB's environmental policy.

### Proposal 1 (\$75 in vouchers)

A minimum order of coffee capsules, 200 each costing \$0.30, costs \$60. Three such orders therefore cost \$180. All categories of customers use coffee capsules in excess of \$180 a year and would therefore benefit from the total discount of \$75.

Customers choose the coffee capsules they purchase and so this would meet WB's environmental policy.

### Proposal 2 (200 free capsules)

The cost to the customer of 200 capsules is \$60. However, our analysis indicates that customers are very particular about the capsules they purchase. This proposal provides "Low" and "Medium" users, and potentially "High" users, with capsules that are not to their taste and will therefore not be used. This proposal therefore fails on WB's environmental policy.

### Proposal 3 (Buy One Get One Free (BOGOF) on new machines)

New machines cost \$200. "High" usage customers require a new machine each year therefore this proposal may appeal to them in terms of value. For "Medium" and "Low" usage customers this proposal is expected to have less appeal as they will not need a new machine for some years. However, because machines break down without warning BOGOF might appeal to customers who like to have a spare machine at hand.

However, proposal 3 will only meet WB's environmental policy for "High" users.

## Conclusion

*(Clear summary of key messages – BOGOF is not wasteful for high usage customers, all customers get benefit of \$75 vouchers. Helpful / clear close.)*

In summary our preliminary findings on the three proposals are:

| Proposal               | Value to users                  | Environmentally friendly                              |
|------------------------|---------------------------------|---|
| 1. Three \$25 vouchers | \$75 to all categories of users | Yes – capsules used                                   |
| 2. 200 free capsules   | Maximum of \$60                 | No – wasted capsules                                  |
| 3. BOGOF machine       | Maximum of \$200                | Yes – for "High" users<br>No – "Medium" & "Low" users |

If you would like to discuss this further, please contact me on [name@worldbeverages.com](mailto:name@worldbeverages.com).

**[Solution – 620 words excluding headings.]**

*(Word count of blue notes is 126.)*



## MARKING SCHEDULE

| OBJECTIVE  | MARKS |
|--|-------|
| <p><b><u>Length of answer</u></b></p> <p>The number of words should be calculated counting all words after the address, heading, salutation etc. up to the sign-off.</p> <p>550–650 words 4</p> <p>500–549, 651–700 words 2</p> <p>&lt;500 or &gt; 700 words 0</p> <p><b>Total for length of answer</b></p>  | 4     |
| <p><b><u>Format of answer – memo</u></b></p> <p>Addressed to Marketing Manager (1)</p> <p>Suitable heading – 3 proposals / Coffee machine promotion (2)</p> <p>From Name (1)</p> <p>Date of memo (1)</p> <p><b>Total for format of answer</b></p>  | 5     |
| <p><b><u>Language used</u></b></p> <p>1 mark for each bullet point, unless stated otherwise</p> <p>Overall language (up to 3 marks)</p> <ul style="list-style-type: none"> <li>• should be understandable to Marketing Manager</li> <li>• a professional tone should be adopted (scripts should avoid comments which “talk down” to the Marketing Manager)</li> <li>• it is unnecessary for mathematical language to be used</li> </ul> <p>Jargon (up to 3 marks)</p> <p>Award three marks and then deduct marks where the script uses jargon that may be confusing for the Marketing Manager. Jargon includes unnecessary technical terms where a simpler term exists, terms and/or abbreviations which are unexplained and so unclear. Superfluous accuracy in the quoted figures counts as jargon.</p> <p>Grammar, spelling and punctuation (up to 5 marks)</p> <p>Award five marks and deduct marks for errors. Minor errors (e.g. “typos” potentially arising as a result of using a keyboard where the candidate should be given the benefit of the doubt) should be ignored. Only deduct marks where the error compromises the professionalism of the document or may require sections to be redrafted.</p> <p><b>Total for language used</b></p> | 11    |

| OBJECTIVE   | MARKS           |
|---|-----------------|
| <p><b><u>Planning and presentation (some marks inc in technical content section)</u></b></p> <p>Grouping of ideas (up to 2 marks)</p> <ul style="list-style-type: none"> <li>Points should follow a logical order so messages are clear and don't need to re-read to understand</li> </ul> <p>(2 marks if clear when read once. If you need to go back and read several times then this is less clear and lower marks should be awarded.)</p> <p>Appropriate short headings on each section (up to 2 marks)</p> <ul style="list-style-type: none"> <li>One mark for each appropriate heading up to 2 marks in total. Long headings or headings that don't succinctly describe what follows do not get a mark.</li> </ul> <p>Sentences kept brief (up to 3 marks)</p> <p>Three marks for a script with short sentences. Marks were deducted for overly long sentence where this made the message unnecessarily complicated. The principle was that a sentence containing more than one message or too many sub-clauses is too long (or, if spoken, a sentence that needs repeated breaks to articulate is too long). A guideline of a sentence that is too long is one that is over 35 words.</p> <p><b>Total for planning and presentation</b></p>  | <p><b>7</b></p> |
| <p><b><u>Content (including some formatting &amp; planning and presentation marks)</u></b></p> <p><b>1. Introduction (Max 4 – see breakdown below)</b></p> <ul style="list-style-type: none"> <li>clear looking at 3 proposals put forward by marketing team (1)</li> </ul> <p>Clearly sets out what memo will include:</p> <ul style="list-style-type: none"> <li>details of customers (1)</li> <li>cost of machine and capsules (1)</li> <li>some analysis of 3 proposals (1)</li> </ul> <p><b>2. Details of three proposals (Max 3)</b></p> <ul style="list-style-type: none"> <li>One mark for each clear simple description of a proposal (1)</li> </ul> <p><b>3. Analytics section (Max 9 – see breakdown below)</b></p> <ul style="list-style-type: none"> <li>clear 3 different groups of customers (1)</li> <li>include appropriate names for 3 groups, e.g. Low / Medium / High (1)</li> <li>brief simple description of each group (3)</li> <li>details of daily capsule usage for each group (2)</li> <li>appropriate comments on capsule use, e.g. customers fussy (2)</li> </ul> <p><b>4. Cost of machine and capsules (Max 12 – see breakdown below)</b></p> <ul style="list-style-type: none"> <li><i>Candidates have been asked to illustrate this.</i></li> </ul> <p><b>(i) <u>Include bar chart or other appropriate graph</u></b></p> <ul style="list-style-type: none"> <li>introduction section saying what chart illustrates (2)</li> </ul> <p><b><u>Clear chart</u></b></p> <ul style="list-style-type: none"> <li>axes – 1 for each (2)</li> <li>legend (1)</li> </ul> |                 |

| OBJECTIVE  | MARKS      |
|--|------------|
| <ul style="list-style-type: none"> <li>• appropriate chart / graph (2)</li> </ul>  |            |
| <b>(ii) <u>Includes information as a table</u></b>   |            |
| <ul style="list-style-type: none"> <li>• award marks on the heading and content of the table (3)</li> </ul>  |            |
| <b><u>Sensible comments on what chart / table shows</u></b>  |            |
| <ul style="list-style-type: none"> <li>• costs of capsules vs machine (2)</li> <li>• lifespan of machine in capsule usage (1)</li> <li>• time span machine will last for different users (2)</li> </ul>  |            |
| <b>5. Method of analysing 3 proposals (Max 17 – see breakdown below)</b>   |            |
| <ul style="list-style-type: none"> <li>• 2 general criteria i.e. engage with customers &amp; environmentally friendly (1 for each)</li> </ul>  |            |
| <b><u>For each of 3 proposals</u> (Max of 5 marks for each proposal)</b>   |            |
| <ul style="list-style-type: none"> <li>• value to customer (1)</li> <li>• commentary / justification on reasons for getting value to customer (2)</li> <li>• appropriate comment on whether proposal meets WB's environmental policy (2)</li> </ul>  |            |
| <b>6. Conclusion / Summary (Max 8 – see breakdown below)</b>   |            |
| <ul style="list-style-type: none"> <li>• Proposal 1 – value \$75 for all groups &amp; environmentally friendly (2)</li> <li>• Proposal 2 – value up to \$60, not environmentally friendly because of capsule wastage (2)</li> <li>• Proposal 3 – value \$200 for High users, not environmentally friendly except for High users (2)</li> </ul> |            |
| Extra comment on Proposal 3 being good for WB as well (as means High users always have a machine) / or anything else relevant (2)  |            |
| <b>7. Deduct marks for irrelevant content (Up to –5)</b>   |            |
| e.g. details on assumptions;<br>irrelevant details on colours available for machines;<br>details candidates have specifically being asked to not include in their answer (e.g. selling on spare coffee machine, passing unused capsules onto others etc.)  |            |
| <b>Total for content</b>   | <b>53</b>  |
| <b><u>Meeting of objectives</u></b>  |            |
| The Marketing Manager is likely to understand the answer.  | 10         |
| The Marketing Manager is likely to be satisfied with the answer.   | 10         |
| <b>Total for meeting objectives</b>  | <b>20</b>  |
| <b>TOTAL MARKS</b>   | <b>100</b> |

Marks are awarded up to the maximum shown in brackets.

E.g. a “brief simple description of each group of customers (3)” can be awarded marks of 0, 1, 2 or 3 depending on how clear and simple the descriptions are.

## PART B – Oral communication

### Scenario: Sales strategy for life insurance product

A possible set of slides to accompany a candidate's presentation is given below. This is not intended to be a model set of slides. In practice, a wide number of sets of slides were acceptable and candidates would have achieved good pass standards without having the same level of detail as the slides below.

Candidates were asked to give a presentation to the sales director of a life insurance company regarding a suggested proposal for a sales strategy for a new insurance product. The sales director is not an actuary, and will want to understand concepts at a high level without a lot of detail.

Candidates were given clear instructions from their manager on what the presentation should include:

- *“a brief recap of the results of the study on home insurance lapse rates that was discussed between Maria and Kurt (no need for too much detail here – just the basic message would be fine);*
- *suggest you also include a graph of the lapse rates for home insurance and life insurance;*
- *an explanation of why Maria's proposal would not be appropriate for a life insurance product (focus on anti-selective lapses being a key driver) together with an illustration of life insurance lapse rates; and*
- *an illustration of the effect that increasing premium rates has on profitability of life insurance policies with appropriate conclusion(s).”*

Candidates were provided with all the information that they needed to answer the question including lapse rates and profit margins for home and life insurance policies.

The main points that the Examiners were looking for and some common problems encountered were as follows:

1. Candidates were asked to deliver a presentation lasting 8–10 minutes. Most candidates delivered presentations that were within an appropriate time frame.
2. Most presentations had an appropriate first slide with a clear title, date and name of presenter.
3. Most presentations had an agenda. On better presentations, the agenda linked directly to the titles and content of the following slides. On weaker presentations, too much time was spent on the agenda giving rise to a laboured start, which tended to disengage the audience.
4. There was a great variation in the quality of the format of slides. Good presentations had slides that clearly backed up the information that was being provided to the audience in a manner that they could understand.

5. Some candidates put full-length narrative sentences on the slides. This was not appropriate to the slide format and tended to make slides over-busy. This also distracted the audience from listening to the presenter.
6. Some candidates included more than one graph on a slide. In general this made the graphs too small for the audience to clearly see. Other candidates included graphs with multiple axes. In general unless the candidate talked very clearly through such complicated graphs the messages were unclear. Better candidates included slides that contained a single graph which the candidate then explained in simple clear terms.
7. As the audience for this presentation was a client it was expected that candidates should be fairly formal. Some candidates were too informal in their language. Some candidates also used patronising language. E.g. telling the sales director that a claim on a life assurance policy was due to someone dying.
8. Better candidates completed their presentation with a brief summary of the key points from their presentation and provided the opportunity to ask questions.

Candidates were not asked to provide a script to accompany the presentation.

## **SOLUTION**

### **Slide 1**

Policyholder behaviour in insurance  
Presentation to BDR Insurance

Current date

Liesel Bauer  
Highholiffe Consultants

### **Slide 2**

Agenda

1. Background
2. Lapse rates in home insurance
3. Lapse rates in life insurance
4. How is life insurance different?
5. Projected profit margins
6. Conclusions
7. Questions

2

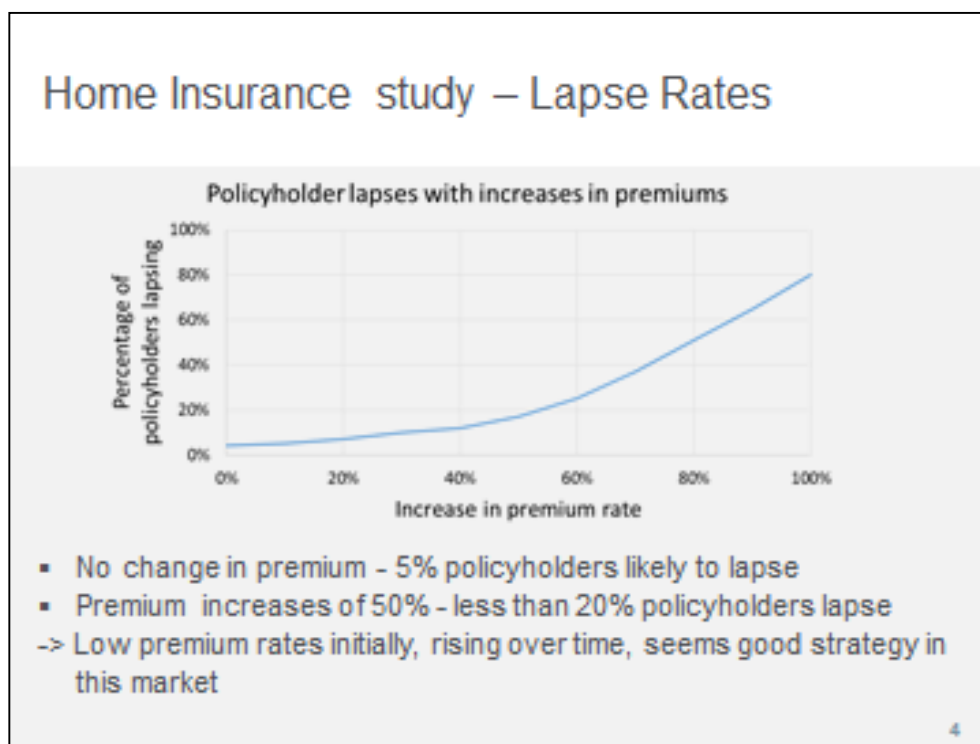
Slide 3

## Background

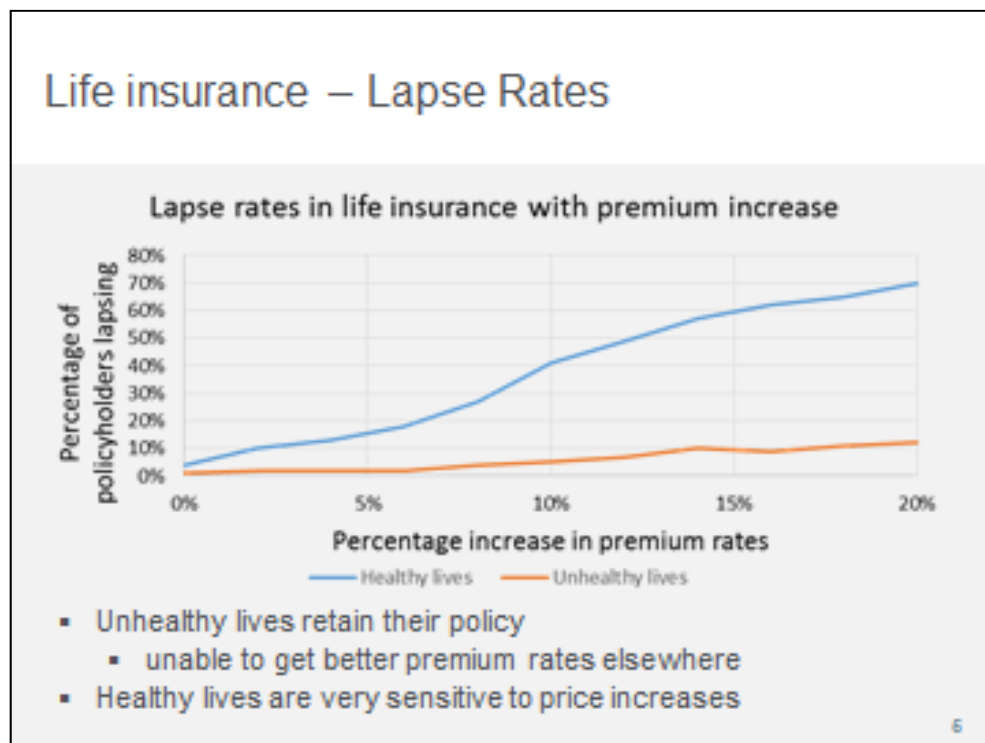
- Reviewing sales strategy for life insurance
  - Aim to maximise profits
- Market is competitive
- Consider new pricing approaches to give us an edge
- Evidence policyholders (for home insurance) stick with current insurer despite price increases
- Maria's proposed strategy for new product is:
  - low initial prices (to attract customers)
  - higher prices later (to maximise profits)
- Will this strategy work with life insurance?

3

Slide 4



Slide 5



Slide 6

### Life insurance different to home insurance?

For home insurance

- Not usually bought through a Financial Advisor
- Effort of finding new cover outweighs benefits of savings

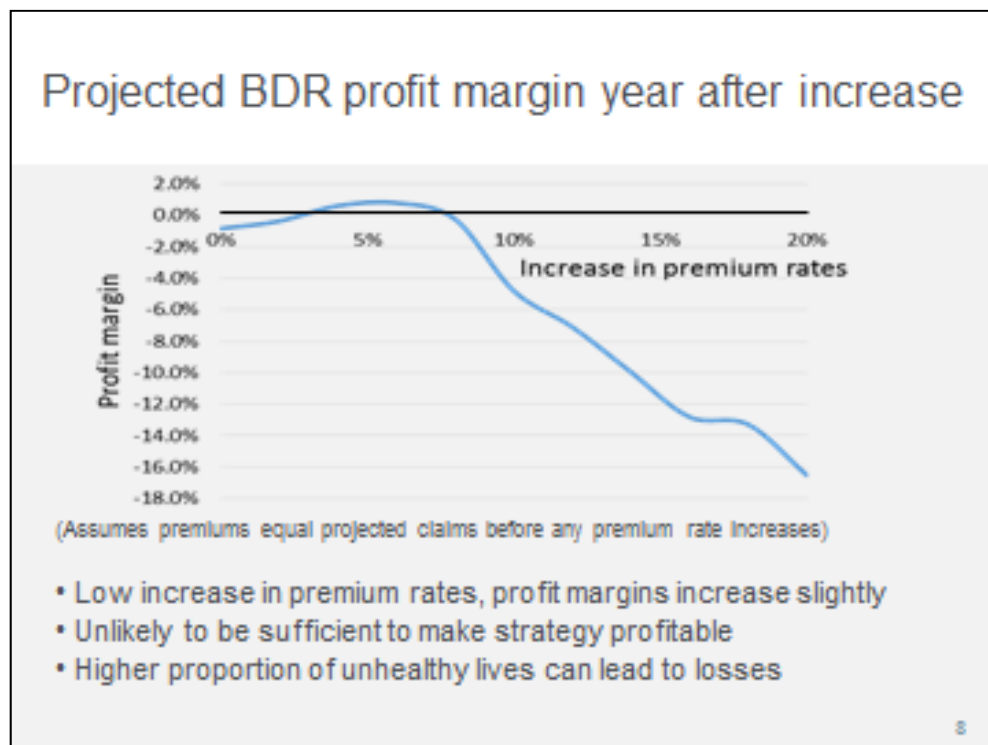
For life insurance

- Life insurance generally bought through a Financial advisor:
  - Advisor's job is to get the best deal for their client
    - combats policyholder inertia!
  - Advisors also get commission if selling new policies
  - Increases in premiums makes healthy policyholders lapse
  - Unhealthy policyholders stay with current product

7



Slide 7



Slide 8

### Conclusions

- Policyholder inertia is a significant factor in home insurance Life insurance industry
- Financial advisors counteract policyholder inertia
- When rates increase, healthy policyholders lapse their policy
- Unhealthy policyholders will keep their policy
- -> unhealthy policyholders are loss-making
- High concentration of unhealthy lives could lead to large losses
- Strategy unlikely to be successful

8

**Slide 9**

Questions?

Liesel Bauer  
[lbauer@Hinchcliffe.com](mailto:lbauer@Hinchcliffe.com)  
Tel: 01234 567890

10

## MARKING SCHEDULE

| MARKS FOR   | MAXIMUM FOR SECTION |
|---|---------------------|
| Introduction (voice & slide) <ul style="list-style-type: none"> <li>• Purpose</li> <li>• Relevant slide</li> <li>• Agenda / what will cover</li> </ul>  | 3                   |
| Voice (2 for each bullet) <ul style="list-style-type: none"> <li>• Audible, clear</li> <li>• Suitable speed</li> <li>• Not monotone</li> <li>• Pause / take time</li> <li>• Emphasise key points</li> </ul>   | 10                  |
| Slide format (2 for each bullet) <ul style="list-style-type: none"> <li>• Not too busy</li> <li>• No full sentences</li> <li>• Interesting / Back-up what is being said</li> <li>• Any graphs labelled</li> <li>• Clear, not too small</li> </ul>   | 10                  |
| Content (Max 32 – restrict to 26) <ul style="list-style-type: none"> <li>• Relevant background information to set the scene (3)</li> <li>• Illustration of the effect of increasing premium rates on lapses in home insurance (3)</li> <li>• Clear statement that policyholders are reasonably insensitive to price increases in home insurance (2)</li> <li>• Acknowledgement that low initial rates followed by increases is a reasonable strategy in home insurance market (3)</li> <li>• Explanation that advisors in the life insurance market combat inertia (5)</li> <li>• Explanation (with illustration) of different lapse rates in healthy and unhealthy lives (4)</li> <li>• Explain what anti-selective lapse rates are and effect of anti-selective lapses on claim rates (5)</li> <li>• Illustration and explanation of the effect on profits (or on profit margin) (4)</li> <li>• Clear statement that Maria's proposal is unlikely to be a good strategy (delivered in a diplomatic way) (3)</li> <li>• Too much detail on home insurance study or other irrelevancies that detract from messages presenter has been asked to include (–5)</li> </ul> (Total marks shown as available in this section are higher than the maximum of 26 marks that can be awarded. This is to reflect the different emphasis that students may place on the relevant points. Good students adequately covering the required content should be able to obtain the maximum of 26 marks on this section.) | 26                  |
| Body language <ul style="list-style-type: none"> <li>• Eye contact (4)</li> <li>• Movement &amp; gestures (4)</li> </ul>  | 8                   |

| <b>MARKS FOR</b>   | <b>MAXIMUM FOR SECTION</b> |
|--|----------------------------|
| Language / jargon (voice & slide) <ul style="list-style-type: none"> <li>• Appropriate language (3)</li> <li>• No jargon (4)</li> <li>• Grammar / spelling reasonable (3)</li> </ul>   | <b>10</b>                  |
| Close (voice & slide) <ul style="list-style-type: none"> <li>• Summarise main points made (6)</li> <li>• Invite questions (2)</li> <li>• Clear close (2)</li> </ul>  | <b>10</b>                  |
| Time taken: 10.5–11.5 mins 1<br>8–10.5 mins 3<br>7–8 mins 2<br>6–7 mins 1<br>< 5 mins 0<br>>11.5 mins 0  | <b>3</b>                   |
| Clients understand main points: <ul style="list-style-type: none"> <li>• Conclusions of the home insurance study</li> <li>• Why these conclusions cannot be applied to life insurance – advisors stop inertia.</li> <li>• The mechanics of anti-selective lapsing – healthy lives can find better rates elsewhere, unhealthy lives cannot.</li> <li>• The effect anti-selective lapses have on claim rates – higher proportion of unhealthy lives therefore higher claim rates</li> <li>• The implications for profitability of raising premium rates significantly.</li> </ul> <b>PLUS</b> <ul style="list-style-type: none"> <li>• High-level explanations</li> <li>• Coherent story</li> <li>• Logical order</li> </ul> | <b>10</b>                  |
| Audience engaged / interested <ul style="list-style-type: none"> <li>• Answers audience's likely questions</li> <li>• Evidently geared for their needs</li> </ul>  | <b>10</b>                  |
| <b>TOTAL MARKS</b>   | <b>100</b>                 |

Marks should be awarded up to the maximum shown in brackets depending on the clarity of the explanation.

## **END OF EXAMINERS' REPORT**