EXAMINATION

September 2005

Subject CA3 — Communications

EXAMINERS' REPORT

Introduction

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

M Flaherty
Chairman of the Board of Examiners

29 November 2005

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Candidates were asked to draft a letter to a friend explaining how the payments were calculated and the rates of interest. The main points that the examiners were looking for and some common problems encountered were as follows.

1. Most candidates had a suitable opening paragraph to the letter. Some scripts noted that the two rates of interest were correct, and little more. The better scripts were those which put the information in context, understanding that the two were apparently in conflict and being understanding of the friend's concerns.
2. Most candidates managed to explain how the repayments were calculated reasonably well. Candidates were expected to explain how the first and last payments were increased. The better candidates covered this succinctly. Some candidates lost marks by either not mentioning or by going into lengthy explanations
3. Most candidates gave adequate explanations of the flat interest rate – either in the description of the calculation of the repayments or in a separate section. Some scripts lost marks for repetition by covering this point twice.
4. Many candidates found it difficult to describe the APR in simple terms. Some explained APR as a compound rate (which generally didn't work very well) or merely stated it to be the 'true' rate or 'real' rate without backing it up with substance. There were also instances where candidates referred to earning interest (as if this was an investment) rather than paying interest - in some cases claiming interest is charged on interest.
5. In explaining the merits of APR, there were times when 'timing of payments' was not used well, e.g. merely stating 'APR also allows for timing of payments.' without any further explanation regarding what this really meant - the key point was that the APR allows for the fact that the loan amount reduces.
6. Some candidates described the APR as a rate which was "financially neutral".
   This was usually unhelpful, as it implied neutrality between two different scenarios, whereas there was only one scenario in the question, and usually only one in the answer.
7. Some candidates incorrectly suggested that the flat rate was wrong, either explicitly of implicitly. Better candidates managed to explain that it does not represent the true cost of a loan, although it is still correct.
8. Better students commented on the merits of APR for comparing rates and as a measure of true cost of the loan, and mentioning that this is what is comparable to the bank rate of 5%. Relatively few candidates seemed to pick up this point as being important to the friend, as they had thought that the 5% flat rate was a good rate compared to bank rates.
9. A small number of scripts gained marks for providing a good explanation as to why the 10.6% was about twice the flat rate of 5%.
10. Some scripts commented about the charges for early termination.
    This was not required within the answer – the CA3 subject is looking for candidates to include relevant information and exclude irrelevant information.
    For some candidates, the brief inclusion of comment on the early termination was part of the explanation of the interest rates and was acceptable.
    Candidates who had lengthy explanations of the termination penalties and how the options could be used to terminate early and take out a new loan tended to lose marks.

11. Some candidates lost marks because of the use of jargon. Technical words that were well explained were acceptable, although candidates who could explain the same point without technical words gained more points. For example, some candidates mentioned the monthly interest rate of 0.84%.
12. Many scripts gained marks for good final paragraphs. Some poorer scripts missed out on marks where the final paragraph introduced new material and ideas.
13. Most scripts were in a suitable format and tone to be a letter to a friend. A minority of scripts appeared to be closer to a formal letter to a customer. Some scripts were over patronising by explaining to the friend that the way a loan works is that you borrow money and then pay it back with interest.
14. A number of candidates had grammatically odd sentences, e.g. "... a mistake has not been made" rather than "...no mistake has been made"
15. A number of scripts suffered from poor spelling, grammar and punctuation.
16. The guideline length was 450 words. Scripts which were below 400 words generally missed out some of the explanation. Scripts which were longer than 500 often lost marks for including unnecessary repetition or irrelevant detail.

A possible answer is attached. In practice a wide number of solutions were acceptable.

Address
Date

Hi Bill.

It was great to see you again last night, and to enjoy a ride in your new car.

You asked how the loan repayments for your car were worked out, and about the two different rates of interest you've been quoted. I'll try to explain these to you.

Your payments

The finance company is charging you 5% of your total loan for every year you have it. After the deposit you've paid and the trade-in of your old car, the loan amount is £13,500. So the total interest charged is:

$$£13{,}500 \times 0.05 \times 4 = £2{,}700$$

On top of this, you have to pay an "Acceptance fee" of £140 at the start and a "Settlement fee" of £95 at the end. Adding the three together, you're paying £2,935 more than you would if you bought your car outright at the start.

Your normal monthly repayment is calculated by adding the £2,700 interest to the £13,500 loan, giving £16,200, and then dividing by 48, giving £337.50. The first and last payments are higher because of the Acceptance and Settlement fees.

The real interest rate

The 5% a year you were quoted is a convenient way for the finance company to calculate the total interest payments. It doesn't take into account that the amount you owe reduces every month, because your payment is more than the interest that's due. It also doesn't allow for the Acceptance and Settlement fees.

The Annual Percentage Rate (APR) allows for all these items. If you had paid the loan straight into a bank account and met the monthly repayments from that, the interest rate you'd need from that bank account would be 10.6% a year. The interest rate of 10.6% is known as the APR.

You can see it's the right kind of level if you think that over the 4 years the amount you owe will reduce from £13,500 to 0, so on average will be about half that — £6,750. With yearly interest of 5% of £13,500, which is £675, the real interest rate is intuitively about 10% a year (£675 divided by £6,750). That's a very rough-and-ready calculation, and the APR is complicated to work out, but it suggests that the APR quoted is correct.

Conclusion

Your finance company has worked out your monthly repayments correctly, but the 5% interest rate quoted is a little misleading. The APR of 10.6% gives a more meaningful idea of the true cost of the loan.

I hope this helps. Give me a shout if you've any questions about it, or if you'd like to discuss what happens if you pay the loan off early.

Regards,

John

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Candidates were asked to draft a presentation to a senior management team, based on an earlier presentation to a technical audience.

1. Most scripts had an appropriate first slide.
2. Better candidates included a slide with the background to the products and the purpose of the policy reviews.
3. The better scripts made use of the information within the question that the senior managers would be expecting premiums for the niche group to increase.
4. Some candidates had difficulty in summarising the information in a way which was straightforward and still technically correct. For example some scripts implied that all of the niche group were age 70.
5. Some candidates confused the idea of mortality charges with the actual numbers of deaths.
6. The better candidates were able to extract relevant information and pitch it for senior managers and leave out what was irrelevant. Some scripts unnecessarily discussed the details of the annual investment returns or the detail of the asset mix.
7. A number of presentations missed the opportunity to change the language away from the technical jargon that had been appropriate for the technical audience.
   EG referring to model points, AM92, age next birthday,
8. There was a great variation in the quality of the format of slides. There were examples both of slides with only a few bullet points, and slides with too much information.
9. Some candidates put full-length narrative sentences on the slides. This tended to make slides over- busy.
10. Better scripts had a variety of formats, including either a chart or diagram. Some scripts had a table.
11. The better scripts had useful diagrams which brought out the point of how the mortality charge was insignificant for the original group, and very significant for the niche group. Scripts with charts that showed other points – such as the fact that the rate of mortality charge had decreased by 15% - did not gain as many marks.
12. Where scripts included a table, marks were gained for how clearly it brought out the messages. For example if a fund value was quoted, it did not need to be quoted to the nearest pence. Large tables of data were unlikely to bring out the key messages clearly.
13. Most scripts had a closing slide. The better scripts include a brief summary of the key messages and next steps.
14. Most scripts gained full marks for being between 6 and 8 slides.

A possible solution is attached. It is not intended to be a model solution. In practice a wide range of solutions was acceptable.

Premium Reviews — Endowments

Impact for older customers

Presentation to Senior Management Team

Date: 1 July 2005
A Jones, Actuary

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Agenda

Background
Policy Reviews — current experience
Policy Reviews — main factors
Charges for life cover
Results for older customers
Summary

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Background

- Policy Reviews for the ABC Endowment are underway
- Reviews are on 5th and 10th anniversaries
- Customers are advised of the premium required to enable the final payout to equal the original Sum Assured
- Typically 5% increase in premiums required
- Most customers were about age 30 when took out ABC Endowment.

Now:

- Policy Reviews for a new group of customers due shortly
- New group from "niche market" campaign, about age 70 when took out the ABC.

This presentation considers results of Policy Reviews.

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Policy Reviews

Policy Review results influenced by 3 factors:

1. Investment growth to date
2. Future expected investment growth
3. Charges for life cover

This means:
- If all assumptions borne out, no change required to premium
- In practice, changes are required

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Policy Reviews

Impacts on original group of customers:

Investment growth to date

Only 4% compared to the 8% assumed: ➔
main reason for the 5% premium increase request

Future expected investment growth

Unchanged

Charges for the life cover

Reduced by 15% compared to assumed level: ➔
Little impact, because young ages
means charges are small compared to other factors

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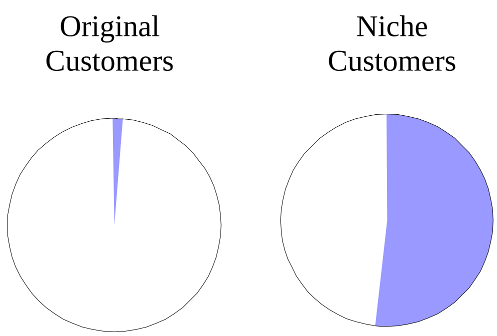
Charges for Life Cover

Share of premium required for Life Cover charge:



Charge for life cover has large effect at older ages
Example: year 10 of policy: age 40 and 80

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Results for older customers

- Older customers still suffer from lower than assumed investment growth to date.

- However, the impact of reduction in the charges for life cover are far more significant:

  – For a younger customer, the charge would reduce from £15 to £13 in year 10.
  – For an older customer, it would reduce from £607 to £526.

Thus for a typical customer paying £1,200 per year, there is a saving of 8% of this premium.

Taking both effects together — older customers can expect a 5% reduction in premiums, rather than the 5% increase experienced by younger customers.

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Summary

Result of policy reviews is different for the 2 groups of customers :

To achieve planned maturity value:

- Younger customers currently need to increase premiums by 5%
- Older customers will be able to reduce premiums by 5%

This is due to the reduction in the charges for life cover — which has benefited older customers substantially.

Next step

Explore possible opportunity for niche group: ➔
maintain premiums, increase maturity planned value

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END OF EXAMINERS' REPORT