

INSTITUTE AND FACULTY OF ACTUARIES

EXAMINERS' REPORT

Subject CA3 - Communications (Presentation) November 2015

Scenario: Employees SAYE scheme

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 the slides required for the presentation is reproduced in this report; other valid approaches were given appropriate credit.

Luke Hatter
Chairman of the Board of Examiners
September 2016

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 Human Resources team of Aardvark to explain how their new Save As You Earn share scheme (SAYE) worked.

Candidates were given clear instructions from their manager on what the presentation should include together with the relevant details.

Candidates were also provided with clear information on their audience for the presentation:

- *"... individuals from various backgrounds, and includes some recent joiners who are new trainees";*
- *"Some of them will not understand the basic details of SAYE schemes and most of them will not know the precise detail of the scheme ...";*
- *"They will not have mathematical backgrounds so you will have to go through the numbers very carefully.";*
- *"They will also be responsible for answering questions from employees about the scheme."*

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 no longer than 10 minutes. Most presentations were delivered within the guideline and gained full marks for the time element. Presentations that were much longer than 10 minutes tended to be long, repetitive and to include irrelevant information. Presentations that were very short (less than 7 minutes) were typically rushed or did not clearly cover all the content requested.
2. As the audience for this presentation did not have mathematical backgrounds, better candidates adopted a simple step by step approach to explaining the numbers that their manager had requested that they include. Including formula such as:

$$\text{Number of shares purchased} = (36 + 2) \times \text{Monthly contribution} / (5.20 \times 0.8)$$

was unnecessarily mathematical for this audience.

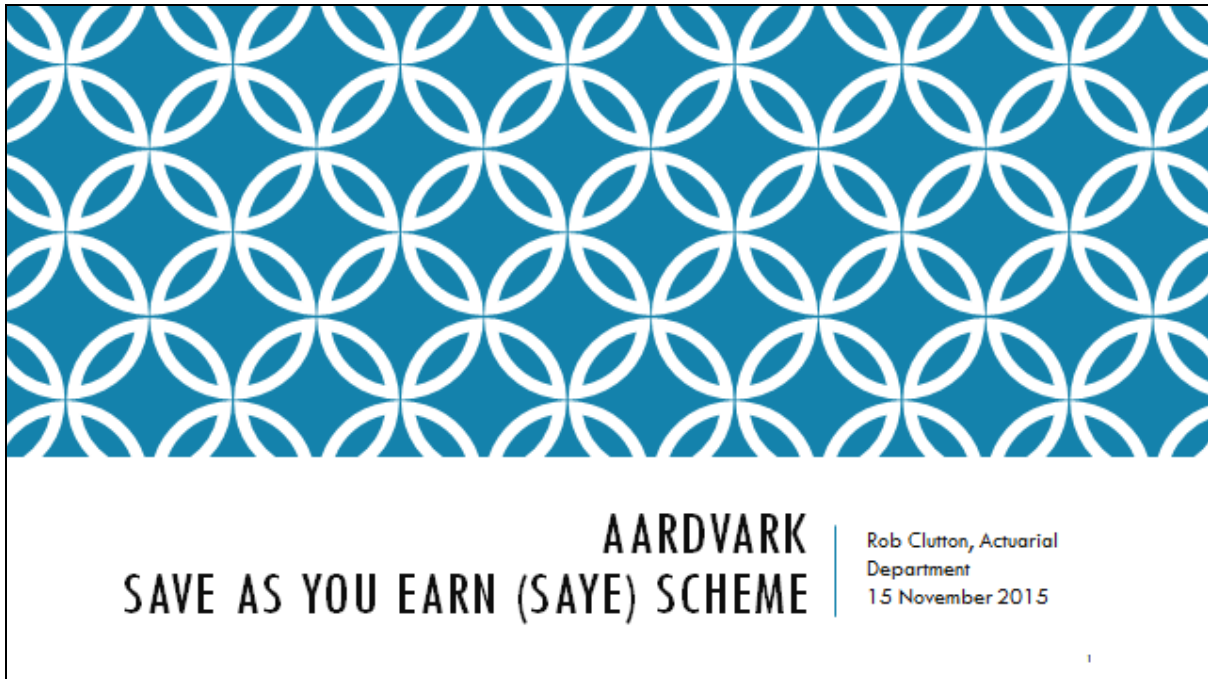
3. Most presentations had an appropriate first slide with a clear title, date and name of presenter.
4. Most presentations had an agenda. On better presentations, the agenda linked directly to the titles and content of the following slides. On weaker presentations, too much time was spent on the agenda giving rise to a laboured start, which tended to disengage the audience.

5. 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. Good presentations had slides that clearly backed up the information that candidates had been asked to include, in a manner that would be understood by the audience.
6. Good presentations included the necessary information in a logical order that would have been easy for the audience to follow.
7. Some candidates included unnecessarily complex information that may have been of interest to an actuarial audience but were not relevant to this audience. For example, details of the average past profit that could have been generated based on the history of share prices provided.
8. Some slides containing graphs contained too much information. For example, some candidates included details of the profit that would be generated from share prices of £4 and £6, and from a savings account generating 3.75% p.a. interest, all on the same slide. Better candidates generally chose to include multiple slides for illustrating different points.
9. Good candidates provided clear simple messages that would have been understood by the Aardvark Human Resources team. For example, share prices can go up or down; Option B provides a guarantee that (at the end of the three year term) you can always get back your total contributions plus a two month bonus contribution; etc.
10. Where presentations included a table of figures rather than a graph, marks were gained for how clearly the table brought out the messages.
11. Better candidates completed their presentation with a brief summary of the key messages and provided the opportunity to ask questions.

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

SOLUTION

Slide 1

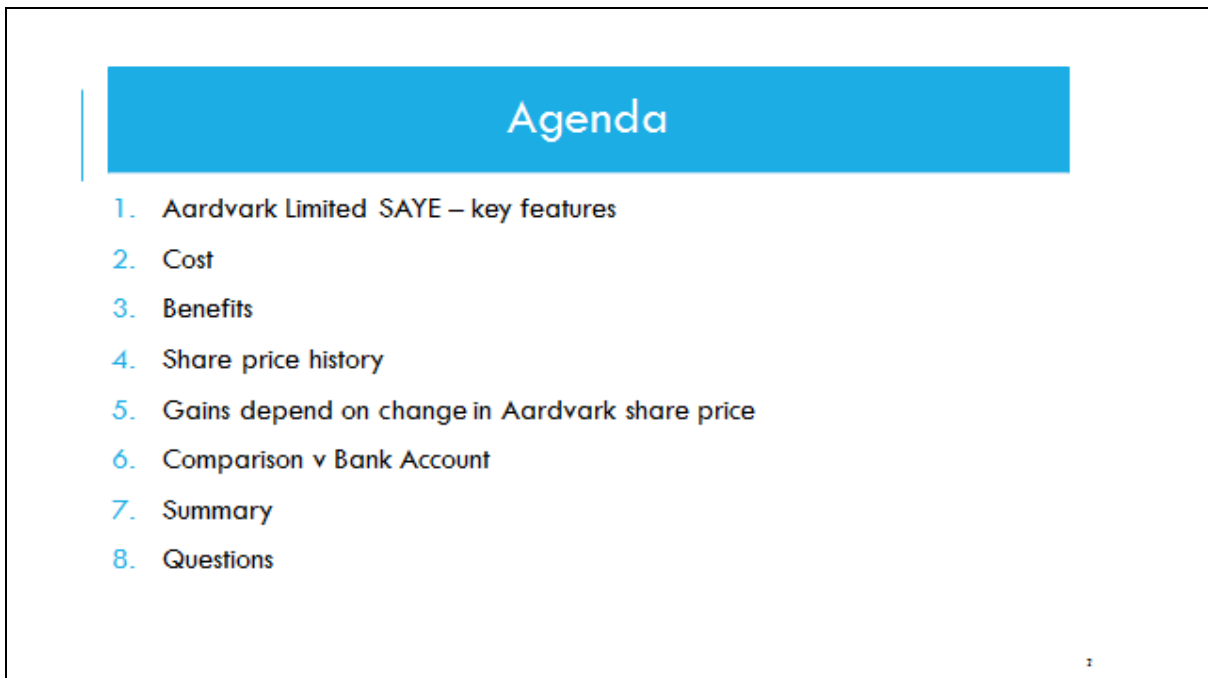


AARDVARK
SAVE AS YOU EARN (SAYE) SCHEME

Rob Clutton, Actuarial
Department
15 November 2015

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Slide 2

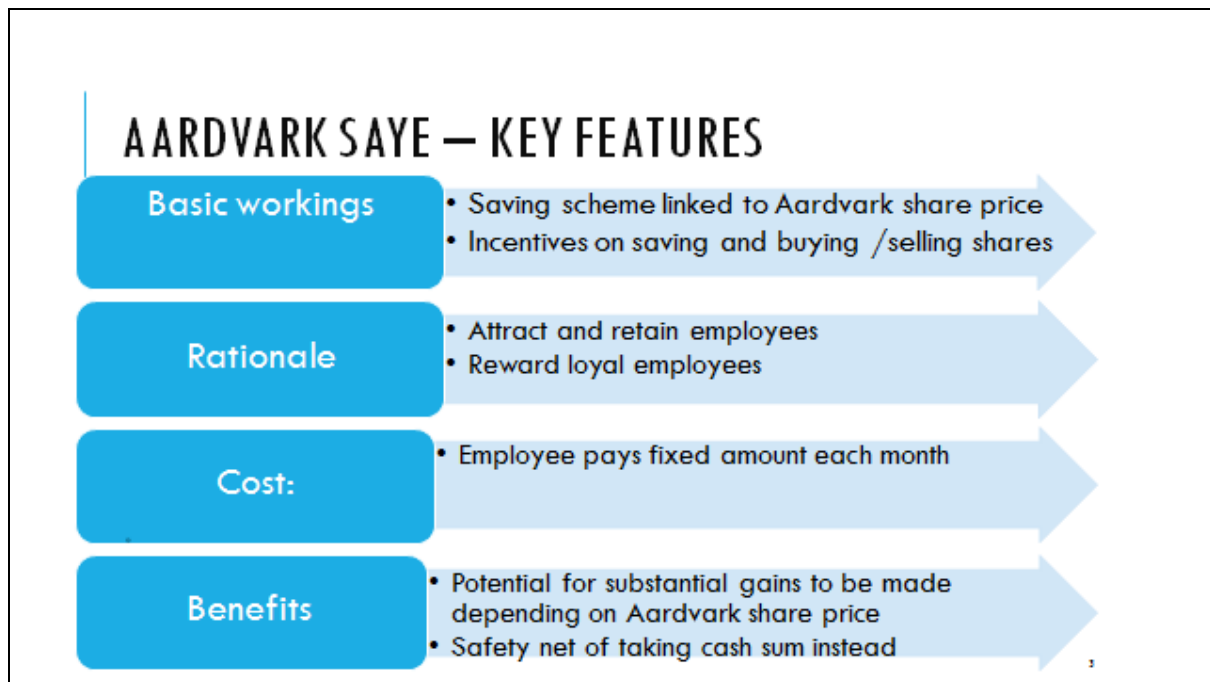


Agenda

1. Aardvark Limited SAYE – key features
2. Cost
3. Benefits
4. Share price history
5. Gains depend on change in Aardvark share price
6. Comparison v Bank Account
7. Summary
8. Questions

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Slide 3



Slide 4



Slide 5

BENEFITS TO EMPLOYEE - IF STAY 3 YEARS

1. Bonus of 2 months' payments granted

AND OPTION TO:

2. Purchase shares at 20% discount to share price on 1 December 2015 **and**
3. Sell shares at end of 3 years based on share price on 1 December 2018

BUT...

If leave voluntarily before 3 years, only get:

- Return of payments made
- No bonus or interest or options to purchase or sell Aardvark shares

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Slide 6

OVERALL BENEFITS AFTER 3 YEARS

1 – gets extra 2 months payments

- Individual contributes £100 a month
- Payments made at end of 3 years $\rightarrow 100 \times 12 \times 3 = £3,600$
- Extra 2 months' payments $\rightarrow + 100 \times 2 = £3,800$

AND OPTIONS

2 – Buy Aardvark shares at 20% discount to price 1 December 2015

- Share price is £5.20, buy at discounted value $\rightarrow £4.16 (= 5.20 - 20\% \times 5.20)$
- Buy $\rightarrow 913$ Aardvark Shares $(= 3,800 / 4.16 = 913.46 \text{ rounded down})$

3 – Sell Aardvark shares at share price on 1 December 2018

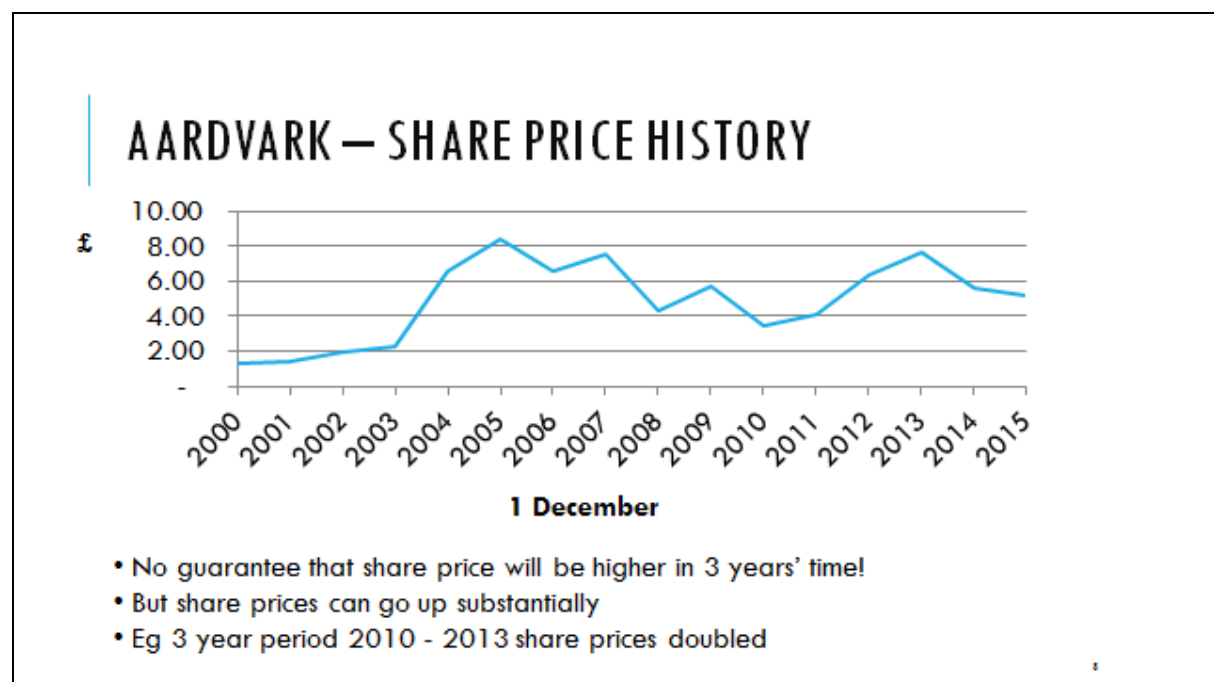
- But share prices can go up or down...

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Slide 7

SELL SHARES AT 1 DECEMBER 2018			
Employee has 913 shares in December 2018			
Example share price at 1/10/2018	Value of SAYE fund if buy Aardvark shares	Exercise Option to buy / sell shares?	Comment on Employee choice
£4	£3,652 (= 913 X 4.00)	x	<ul style="list-style-type: none"> Share price is below purchase price of £4.16 Employee can buy Aardvark shares cheaper on open market Better to take Cash Sum of £3,800
£6	£5,478 (= 913 X 6.00)	✓	<ul style="list-style-type: none"> Share price is above purchase price of £4.16 Employee has paid £3,600 Employee makes gain of £1,878 (= 5,478 – 3,600)

Slide 8



Slide 9

AARDVARK SAYE CASH OPTION vs BANK ACCOUNT

- Minimum employee gets after 3 years is £3,800
- £3,800 is equivalent to an interest rate of approx 3.75% per annum (unlikely to achieve this rate of interest in a bank account at present)
- What rate can employee earn in bank account?

BUT

- Earlier withdrawal – GET NO INTEREST OR BONUS

- Employee should consider:

Stay 3 years & share price below £4.16

Leave voluntarily within 3 years

- Whether interest of over 3.75% pa could have been achieved elsewhere

- He/she would be worse off than if put money in savings account

Slide 10

SUMMARY

1. Aardvark 3 year SAYE scheme – 3 key benefits
 - get 2 months bonus contributions, PLUS
 - buy Aardvark shares at discounted price at December 2015, and
 - sell Aardvark shares at price at December 2018
2. Value of SAYE in December 2018 depends on Aardvark share price at December 2018
3. Fall-back of contributions plus 2 months bonus BUT
4. May do better just investing in bank (only if interest rate > 3.75%pa)
5. If leave before 3 years – just get money back

Slide 11

ANY QUESTIONS?

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END OF EXAMINERS' REPORT