

# Embracing change. Shaping futures.

## Advanced Financial Management

Read the mind of an AFM marker

# Contents

<b>Introduction</b>	<b>3</b>
<b>Question 2</b>	<b>4</b>
> Observations on the requirements	4
> Notes on candidate one's answer to Q2	5
> Notes on candidate two's answer to Q2	7
<b>March/June 2018 exams marked answers</b>	<b>9</b>
> Question 2 candidate one	9
> Question 2 candidate two	11

## Introduction

**I am a member of the team who will mark Advanced Financial Management. This article is designed to give you, the candidate, an insight into my mind, so that you can better understand what a marker will be looking for when it comes to marking your Advanced Financial Management script.**

Insight into a marker's thinking – appreciating what we are trained to look for, what we award marks for, the reasons why marks may not be awarded – will help you fulfil your potential and gain the necessary marks to pass.

It will help you appreciate the points that will attract marks so that you can better assess your answers when practicing questions.

This article uses two candidates' answers to a question selected from the March 2018 exam.

To support your reading of this article, you should refer to the March/June 2018 – Sample Questions.

**[Click the link here.](#)**

**Fulfil your potential  
and gain the necessary  
marks to pass.**

## Question 2

Question 2 has requirements that feature regularly in this exam, namely to apply a technique to an investment decision and then discuss some specific issue relevant to the decision. Here the technique is adjusted present value and the issue is how the investment should be financed. In another question the technique could be the modified duration method or net present value model.

The examiner's report emphasises that requisite core skills include appreciating why information in scenarios will affect the decisions being taken, understanding the viewpoints of those interested in the decisions, and communicating recommendations clearly and concisely. The following question examined all these skills.

(a) Calculate the adjusted present value for the investment on the basis that it is financed by the subsidised loan and conclude whether the project should be accepted or not. Show all relevant calculations. (17 marks)

(b) Discuss the issues which Tippetine Co's shareholders who are not directors would consider if its directors decided that the new investment should be financed by the issue of convertible loan notes on the terms suggested.

Note: You are not required to carry out any calculations when answering part (b). (8 marks)

**25 marks**

**Show all relevant calculations.**

## Observations on the requirements

The 25 marks were split between two requirements:

Part (a) for 17 marks required a calculation of adjusted present value and a conclusion on whether or not the project should be accepted. Note the prompt to show all relevant calculations. This is absolutely essential. Almost all candidates will make some mistakes or omit some element of the calculation, but as long as the marker can follow the calculations, marks will be awarded for applying the correct method.

Part (b) for 8 marks required a discussion of an alternative form of loan finance (convertible loan notes) that could be used to fund the investment.

For the calculation in part (a), each part of the calculation will generally be awarded 1 or 2 marks, depending on complexity. A well-justified conclusion is likely to be worth 2 marks.

**Discuss means to consider the pros and cons of an issue.**

For a discussion, each relevant point will generally be awarded 1 mark. Remember, however, that to discuss means to consider the pros and cons of an issue.

A good answer to part (a) would take a methodical approach with clear and easy to follow workings.

A good answer to part (b) would include the important features of the alternative finance and cover both advantages and disadvantages (or arguments for and against) from the shareholders' viewpoint, as the question required. When a question prompts a specific viewpoint – in this case, 'shareholders who are not directors', your answer must address what should be *their* concerns about the financing decision.

## Notes on candidate one's answer to Q2

Follow this link to see candidate one's answer to Q2

[View it here](#)

### Note 1

One mark for all correct cash flows excluding marketing costs. There were no marks available for the marketing costs, as they could be lifted from the scenario without any calculation.

### Note 2

There is no 'depreciation' line in the model answer but the mark is awarded because it can be clearly seen that this is the tax allowable depreciation shown in working 1 of the model answer. As it would therefore be unnecessary to refer to the referenced working (W1), this has not been reproduced in the script.

### Note 3

Two marks are awarded for the correct calculation of the tax cash flows after adjustment for the losses. These would far better have been shown in a separate working. The attempt to incorporate the working in the answer gives rise to later errors (see Note 6).

### Note 4

There were no marks available for the initial investment as the amount and its timing lift directly from the question.

### Note 5

Two marks awarded for correct working capital adjustments. As it would therefore be unnecessary to refer to the referenced working (W2), this has not been reproduced in the script.

### Note 6

Even though all the cash flows for Years 1-5 are incorrect, the candidate has been awarded the full 6 marks available at this point. It is not the task of the marker to rework a candidate's answer to determine how or where errors have arisen. However, for the purpose of this article, this has been determined to reinforce the point that the inappropriate incorporation of workings within an answer may result in errors. In this script, the candidate has incorrectly included the adjustments for losses in the calculation of tax flows in the net cash flows. (see Note 3). There is also an arithmetic error in the calculation of profit for year 3 (should be 8,922, not 9,922).

### Note 7

The discount factors are incorrect. However, as there is a referenced working (W3), some credit may be given later (see Note 9.)

### Note 8

One mark is awarded for the base case NPV, even though the cash flows and the discount factors are incorrect. This 'method mark' shows the application of the 'own error rule'.

**Inappropriate incorporation  
of workings within an  
answer may result in errors.**

**Note 9**

The formula used is correct and the candidate has identified the correct figures to use in the calculation. But there is obviously some mistake in the calculation as the result is incorrect. One of the two available marks is therefore awarded for method. Again, it is not the marker's task to rework an answer to determine how or where errors arose. However, for the purpose of this article, we can note two errors: the amounts for  $V_d$  and  $V_e$  have been carelessly swapped and the expansion of the brackets is mathematically incorrect.

**Note 10**

One mark for correct issue cost.

**Note 11**

There were two marks available for the tax shield. One mark is given for the correct calculation of the interest. The candidate's error in the PV calculation was not in using the risk-free rate of 2.5% rather than 5% (as either rate could be used here) but in using the PV of an annuity for years 1 – 4 rather than 2 – 5 (i.e. recognising that tax would be saved with a year's delay).

**Note 12**

No marks have been awarded here as the benefit of the subsidised loan should be only the lower interest, which would give rise to the loss of tax relief. The candidate's calculation incorrectly claims that the loan in its entirety could be written off every year for tax purposes.

**Note 13**

One mark is awarded for the calculation of adjusted net present value, even though all the amounts are incorrect.

**Note 14**

A mark has been given for a written conclusion consistent with the calculation of APV. For the full two marks, the candidate could have commented on the base NPV and the main reason for the difference.

**Note 15**

These comments do not contribute to a discussion of convertible loans notes as an alternative since the subsidised loan would also increase gearing and has the same issue costs.

**Note 16**

Simply copying details from the question earns no marks. Marks are awarded for providing insights about the information. Failing to add anything to scenario detail means that sometime candidates write a lot but do not score well. Candidates are encouraged to highlight relevant details when reading a scenario and then **think** how they can add value to the information **before** writing an answer.

**Note 17**

Mark awarded for recognising what would be a significant issue; the company would need to have sufficient money to redeem the loan notes.

The mark for candidate one for Q2 is 13/25.

**TOTAL:****13/25**

**Marks are awarded for providing insights about the information.**

## Notes on candidate two's answer to Q2

Follow this link to see candidate two's answer to Q2

[View it here](#)

### Note 1

One mark for all correct cash flows excluding marketing costs. As for candidate one, there were no marks available for the marketing costs.

### Note 2

There is no caption 'Allowable depreciation' in the model answer so it is necessary to look to the referenced working (W2) to see if there is any credit to be awarded. This line of the working would not need to have been 'reversed out' later in the calculation if a suitable separate working had been shown for the tax cash flows.

### Note 3

Even though there are now clearly errors in the cash flow before tax, one mark is given for a calculation of tax at 30% which recognises that tax is payable with a year's time delay.

### Note 4

There were no marks available for the initial investment or the realisable value since these, and their timings, lift directly from the question.

### Note 5

Working capital amounts are all correct except for the last amount. Together with the referenced working, W3 (see Note 8), this has been awarded one of the available two marks.

### Note 6

The mark has already been awarded (see Note 1).

### Note 7

The middle column of this working shows the tax-allowable depreciation (TAD). Although there is no indication whether the balancing amount is a charge or an allowance, the amounts are correct and the mark available has been awarded.

The right hand column is the tax saving thereon. This is superfluous. The candidate should have incorporated the TAD in a working for tax including the offset of previous losses (which the candidate has ignored). As one mark has already been given for the calculation of tax (see Note 3), no further credit can be given here.

### Note 8

One mark has so far been awarded (see Note 5). Here you can see the mistake in the year 4 amount. The question stated 'any working capital at the start of Year 4 will be assumed to be released at the end of the appraisal period'. The cash flow at the end of Year 3 should therefore have been reversed at the end of Year 4. As this is a fundamental point, no further credit can be awarded.

**Note 9**

This answer is substantially incomplete and tackles only 6 of the available 17 marks. Even if the candidate did not know how to calculate an ungeared cost of equity, they would have earned a mark for calculating a base case NPV assuming a sensible rate (i.e. less than the 10.5% geared cost given in the question).

**Note 10**

Rewriting the requirement to introduce an answer is unnecessary. A concise heading would suffice.

**Note 11**

Two marks awarded for identifying and explaining a relevant concern for shareholders regarding their future earnings.

**Note 12**

Copying out the details from the scenario here was unnecessary. Also, since neither the directors nor historical trends could provide any assurance about future share prices there are no marks for these points. However, one mark is awarded for expressing reservation about the option to redeem if the share price is low.

**Note 13**

The words may be slightly different but this is essentially repeating the first point. So marks have already been awarded and no further credit can be given here.

**Note 14**

As for Note 12, although the directors cannot give any assurance ('comfort') in this regard, one mark has been awarded for appreciating that the company would need to have sufficient money to redeem the loan notes.

**Note 15**

Overall this is a reasonable attempt, especially as the examiner reported that this part was often omitted. However, the candidate has focused exclusively on negative issues. A good answer needed to consider also some positive aspects of the proposition.

The mark for candidate two for Q2 is 8/25.

**TOTAL:****8/25**



## March/June 2018 exam marked answers

### Marks

#### Question 2 candidate one

✓ denotes 1 mark

(a)

	Y0	Y1	Y2	Y3	Y4	Y5
<b>(in 000's)</b>						
Cashflow		2,000	14,500	15,225	15,834	✓
Marketing cost		(9,000)	(2,000)	(2,000)	(2,000)	
Depreciation (W1)		(7,650)	(5,738)	(4,303)	591	✓
Profit/Loss	-	(14,650)	6,762	9,922	14,425	-
Loss carried forward	-	-	(6,762)	(7,888)	-	-
Taxable profit	-	-	-	1,034	14,425	✓✓
Tax (@30%)	-	-	-	-	(310)	(4,328)
After tax cash flow	-	-	-	1,034	14,115	(4,328)
Add: Dep'n	-	7,650	5,738	4,303	591	-
Initial investment	(30,600)					
Working capital (W2)	(3,000)	(240)	(194)	(172)	3,606	✓✓
Cashflow	(33,600)	7,410	5,544	5,165	18,312	(4,328)
DF (@10%) (W3)	0	0.909	0.826	0.751	0.683	0.621
	(33,600)	6,736	4,579	3,879	12,507	(2,688)

Therefore, NPV = \$(8,587,000) ✓

Workings

1. Not reproduced

2. Not reproduced

3. Calculation of Discount Rate:

$$MV \text{ of equity} = 125 \times 3.2 = \$400m$$

$$MV \text{ of debt} = 225 \times 107/100 = \$241m$$

Using MM Proposition 2 (with tax)

$$k_e = k_e^d + (1-T)(k_e^d - k_d)V_d/V_e$$

$$10.5\% = k_e^d + (1 - 0.30)(k_e^d - 5.4\%)400/241$$

$$10.5\% = k_e^d + 0.70k_e^d - 0.0378 \times 400/241$$

$$10.5\% + 0.0627 = 1.7k_e^d$$

$$k_e^d = 9.86\% \checkmark = 10\% \text{ (rounded)}$$



Notes

← Note 1

← Note 2

← Note 3

← Note 2

← Note 4

← Note 5

← Note 6

← Note 7

← Note 8

← Note 2

← Note 5

← Note 9

Relevant notes

## Marks

✓ denotes 1 mark

Financing side

$$\text{Issue cost} = 30,600 / 96\% \times 4\% = \$1,275 \quad \checkmark$$

$$\text{Tax relief on interest on subsidised loan} = 30,600 \times 0.022 \times 0.30 = 202 \quad \checkmark$$

$$\begin{aligned} \text{PV of tax relief discounts at } R_f \text{ @2.5\%} \\ = 202 \times (1 - (1.025)^{-4} / 0.025) = 760 \end{aligned}$$

$$\text{Tax saved on subsidised loan} = 30,600 \times 0.30 \times 0.7 = 6,426$$

$$\text{PV of tax saved on loan} = 6,426 \times ((1 - (1.025)^{-4}) / 0.025) = 24,174$$

	In \$000
Therefore, base NPV	(8,587)
Add: Tax relief on interest	760
Add: Tax relief on subsidised loan	24,174
Les: Issue cost	(1,275)
	\$15,072m ✓
Adjusted NPV	

Hence, the project should be accepted since the adjusted NPV is positive. ✓

**TOTAL – Part (a):**  
**12/17**

**(b) Convertible loan note**

Tippetine's shareholders will be concerned about the gearing of company if further loan notes are issued. Issue cost of loan notes are issued. Issue cost of loan note represent 4% which is not a tax deductible expense. Conclusion of bond into equity enhances the gearing.

It is said loan are paid out of a viable cash reserve. Redemption could have taken place at any time from start to year 3 where the share price is below \$1.50. The current share price is £2.20 and conversion took place at \$2.75.

Tippetine won't possess enough cash if the bond is redeemed. Its cashflow will be affected adversely.

0

← Note 15

0

← Note 16

1

← Note 17

**TOTAL – Part (b):**  
**1/8**

**TOTAL –**  
**Q2:**  
**13/25**

Relevant notes

## Marks

## Question 2 candidate two

✓ denotes 1 mark

## (a) Calculation of the APV for Tippetine Co

Year	0	1	2	3	4	5
	\$000	\$000	\$000	\$000	\$000	\$000
Cashflows						
Op. Cashflows (W1)		2,000	14,500	15,225	15,834	✓
Marketing costs		(9,000)	(2,000)	(2,000)	(2,000)	
Allowable dep'n (W2)		(2,295)	(1,721.15)	(1,290.94)	(177.19)	
Net cashflows		(9,295)	10,778.75	11,934.06	13,656.89	
Taxation (30%)			(2,788.50)	(3,233.63)	(3,580.22)	(4,097.04) ✓
Net tax		(9,295)	7,990.25	8,700.43	10,076.59	4,097.04
Initial investment	(30,600)					
Working capital (W3)	(3,000)	(240)	(194.40)	(177.72)	3,749.92	✓
Allowable dep'n		2,295	1,721.25	1,290.94	177.19	
Realisable value					13,500	
Net cash	(33,600)	(7,240)	9,577.10	9,819.65	27,503.70	4,097.04

## Workings

1) Year	Cashflows (\$000s)
1	2,000
2	14,500
3	15,225 (14,500 × 1.05)
4	15,834 (14,500 × 1.05 × 1.04)

## 2) Tax allowable depreciation

Year	Cost (\$000)	Depreciation 25%	Tax allowance (30%)
1	30,600	7,650	2,295
2	22,950	5,737.75	1,721.25
3	17,212.25	4,303.12	1,290.94
4	12,909.38	} 590.62 ✓	177.19
4 R/value	13,500		

## 3) Working capital

Year	Cashflow	Incremental amounts
0	3,000	-
1	3,240	240
2	3,434.40	194.40
3	3,606.12	177.72
4	3,750.36	143.80

TOTAL – Part (a):  
**4/17**

## Notes

← Note 1

← Note 2

← Note 3

← Note 4

← Note 5

← Note 2

← Note 4

← Note 6

← Note 7

← Note 8

← Note 9

Relevant notes

## Marks

(b) Issues Tippetine Co's shareholders would consider in the event that directors decide to fund the project using convertible loans:

- Conversion of loans into shares may result in the dilution of the existing shareholders position and subsequently entitle the new shareholders a share into the earnings of Tippetine Co. Existing shareholders will thus need to review the extent of their share value's impact following conversion of the loan.
- The case mentions that the redemption can be forced if the share value of Tippetine Co falls below \$1.50 per share. The existing shareholders would thus seek assurance from the directors that the current share price is sustainable. It is also vital that they review the historical trends of the company's share price for example, over the last three years.
- Existing shareholders will also need to consider what will be the impact of the conversion on the existing share price and dividends.
- Existing shareholders will also need comfort from the directors that the company would have adequate cashflows to meet the repayments should the redemption clause be triggered.

**TOTAL – Part (b):**  
**4/8**

## Notes

← Note 10

**2**

← Note 11

**1**

← Note 12

**0**

← Note 13

**1**

← Note 14

← Note 15

**TOTAL –**  
**Q2:**

**8/25**

Relevant notes

For more tutor resources,  
visit [accaglobal.com/  
educationhub](https://accaglobal.com/educationhub)

For more student resources,  
visit [accaglobal.com/  
exam-resources](https://accaglobal.com/exam-resources)