



Think Ahead

Financial Management (FM) March/June 2024 Examiner's report

The examining team share their observations from the marking process to highlight strengths and weaknesses in candidates' performance, and to offer constructive advice for those sitting the exam in the future.

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General comments

This examiner's report should be used in conjunction with the published March/June 2024 sample exam which can be found on the [ACCA Practice Platform](#).

In this report, the examining team provide constructive guidance on how to answer the questions whilst sharing their observations from the marking process, highlighting the strengths and weaknesses of candidates who attempted these questions. Future candidates can use this examiner's report as part of their exam preparation, attempting question practice on the [ACCA Practice Platform](#), reviewing the published answers alongside this report.

The Financial Management (FM) exam is offered as a computer-based exam (CBE). The model of delivery for the CBE exam means that candidates do not all receive the same set of questions. In this report, the examining team offer detailed debriefs of selected questions from each section of the exam.

- Section A objective test questions – we focus on four specific questions that caused difficulty in the March/June 2024 sittings of the exam.
- Section B objective test case questions – here we look at one case from syllabus area C in detail.
- Section C constructed response questions – here we provide commentary on two questions, providing guidance on answering these questions and where exam technique could be improved.

Section A

In this section we will look at **FOUR** Section A questions which proved to be particularly difficult for candidates.

Example one

Which of the following is an implication of the semi-strong form of the efficient markets hypothesis?

- A. Security price movements should be predictable
- B. Security prices should fully and fairly reflect all available information, whether public or private
- C. Security prices should move when a takeover is announced
- D. There would be no need to ban insider dealing

What does this test?

- ✓ The understanding of the distinction between weak form efficiency, semi-strong form efficiency and strong form efficiency

What is the correct answer?

- ✓ The correct answer is **C**

Security price movements should be unpredictable in an efficient market. Many candidates incorrectly assumed this unpredictability does not apply to semi-strong form efficient markets, possibly based on the misunderstanding that only strong form efficient markets are efficient. It is worth emphasising that all forms of efficiency under the efficient market hypothesis, even weak form and semi-strong form efficiency, exhibit this trait.

The semi-strong version of the efficient market hypothesis incorporates publicly available information into the security price, but not private information. For this reason, security prices should move when a takeover is announced in a semi-strong efficient market as this means previously private information now becomes public. Insider dealing undermines investor confidence in a semi-strong efficient market because there is the potential to make abnormal profits using information which is not in the public domain. To avoid a loss of confidence in a semi-strong efficient market, there would therefore need to be a ban on insider dealing.

Example two

The following information relates to Blanc Co's inventory:

	Units
Annual demand	400,000
Order quantity	70,000
Reorder level	30,000
Lead time	3 weeks

Assume 50 weeks in the year.

What is the buffer (safety) level of inventory?

- A. 6,000 units
- B. 40,000 units
- C. 30,000 units
- D. 24,000 units

What does this test?

- ✓ The understanding of relevant techniques in managing inventory

What is the correct answer?

- ✓ The correct answer is **A**

Consumption per week = 400,000 units / 50 weeks = 8,000 units

Consumption during lead time = 8,000 units x 3 weeks = 24,000 units

Buffer = Reorder level – consumption during lead time = 30,000 units – 24,000 units = 6,000 units

Commonly seen errors included using the consumption during lead time figure, the reorder level and the order quantity less the reorder level as the buffer level of inventory.

Example three

Alfreda Co is an unlisted company with 200 million \$1 ordinary shares in issue. It has earnings attributable to ordinary shareholders of \$90m, of which \$30m was distributed to shareholders as an ordinary dividend.

Otis Co is a listed company with 550 million ordinary shares in issue. Its earnings per share ratio is \$0.25 and its market capitalisation is \$2,750m.

What is the value of an ordinary share in Alfreda Co using Otis Co's price/earnings ratio?

\$ _____

What does this test?

- ✓ The application of the price/earnings ratio valuation method

What is the correct answer?

The correct answer is **\$9**

Otis Co's price/earnings ratio = $\$2,750\text{m} / (\$550\text{m} \times \$0.25) = 20$

Alfreda Co's earnings per share = $\$90\text{m} / \$200\text{m} = \$0.45$

Alfreda Co's share price = $20 \times \$0.45 = \9

Commonly seen errors included using retained earnings to calculate Alfreda Co's earnings per share and calculating Otis Co's share price instead of Alfreda Co's share price.

Example four

A company is planning a major investment in a new manufacturing unit in the next year. Due to recent concerns that the economy may be growing too slowly, the government has unexpectedly announced a decrease in interest rates.

Which of the following statements concerning the impact of the government's decision is TRUE?

- A. The company's cost of capital will increase
- B. The company's shareholders will require higher returns
- C. Demand for the company's products will increase
- D. The NPV of the investment will be lower than initially expected

What does this test?

- ✓ The understanding of how government economic policy interacts with planning and decision-making in business

What is the correct answer?

- ✓ The correct answer is **C**

An interest rate decrease will result in lower shareholder returns and a reduction in the cost of capital, which, in turn, will increase the investment's net present value. A reduction in interest rates is normally associated with an increase in spending and assuming all other variables remain constant, this will increase the demand for the company's products.

Section B

Section B tests candidates' knowledge on a number of topics in more detail than section A, with three case questions containing five two-mark objective test questions.

Here is an example case question on syllabus area G risk management.

Tamunac Co

A large manufacturing company, Tamunac Co, imports its raw material from a foreign country and sells its products in its home country only. To pay for its raw material purchases, the company generates suitable debt financing in the foreign country. The home country's currency is the \$ while the foreign country's currency is the €.

A forward rate agreement (FRA) has been used on the borrowing for a recent raw material purchase of €10m. Before the purchase, a 3-6 4.00-3.60 FRA was acquired in the foreign country. The actual base rate applicable on borrowing the €10m was 3.2%.

Separately, Tamunac Co will receive a volume discount of €1.5m in three months' time. To protect against a depreciation of the dollar, the finance director has decided to set up a money market hedge for this amount.

The relevant financial information is as follows:

Spot rate: €1.16 = \$1

Interest rate details:

	Borrowing	Deposit
	%	%
\$ interest rates per year	4	2
€ interest rates per year	6	3

Question one

The finance director is analysing the yield curve in the foreign country's market to select a suitable financing strategy. He observes that the yield curve has recently changed from a normal yield curve to become an inverted yield curve.

Which TWO of the following are true in this situation?

- A. Bonds with a long-term maturity term will have higher returns
- B. Tamunac Co is exposed to rising interest rates in the foreign country
- C. The change would have been beneficial for Tamunac Co if it had issued long-term variable rate debt before the inversion
- D. Raising Eurobond financing in the foreign country's currency has become more attractive

What is the correct answer?

✓ The correct answer is **C** and **D**

A normal yield curve is upward sloping, so that the yield is higher on instruments with long-term maturities. An inverted yield curve is downward sloping, so that the yield is lower on instruments with long term maturities.

With an inverted yield curve, interest rates are expected to fall in the future, which makes it more attractive to borrow long-term (eg issue Eurobonds). In these circumstances, longer-term borrowing with a variable rate is recommended.

Question two

Which of the following best explains 'basis risk'?

- A.** Interest rates changing before bonds are issued
- B.** Foreign currency becoming more expensive to buy
- C.** More funds needing to be raised due to increase in raw material costs
- D.** The funds needed at maturity not being entirely hedged

What is the correct answer?

✓ The correct answer is **D**

Basis risk arises when a hedge does not exactly offset the cash effect of a change in the price of the underlying asset. This may occur if the funds needed at maturity are not entirely hedged.

Question three

Which of the following is the correct transfer in relation to the FRA?

- A.** €20,000 payable
- B.** €80,000 payable
- C.** €10,000 payable
- D.** €100,000 payable

What is the correct answer?

✓ The correct answer is **A**

Tamunac Co is borrowing euros so the higher rate of 4% is the applicable FRA rate. A 3-6 FRA will start in 3 months' time and end in 6 months' time, covering a 3 month period. Since the company borrowed money at a lower interest rate, it will pay compensation under the FRA, corresponding to the following interest rate difference:

$$€10\text{m} \times (4.0\% - 3.2\%) \times 3/12 = €20,000$$

A proportion of candidates incorrectly used the FRA lending rate of 3.6% instead of the borrowing rate of 4%, as follows:

$$€10\text{m} \times (3.6\% - 3.2\%) \times 3/12 = €10,000$$

A significant proportion of candidates also failed to understand that the actual borrowing is arranged separately from the FRA, based on the following calculation:

$$€10\text{m} \times 3.2\% \times 3/12 = €80,000$$

Question four

How much will Tamunac Co expect to receive from the €1.5m volume discount?

- A. \$1,244,307
- B. \$1,305,970
- C. \$1,337,694
- D. \$1,280,364

What is the correct answer?

✓ The correct answer is **D**

For a money market hedge, Tamunac Co will be borrowing in euros and will make a deposit in dollars. The annual rates provided in the question need to be pro-rated since the hedge only covers a period of three months. The pro-rated interest rates are as follows:

Euro borrowing rate: $6\% / 4 = 1.5\%$ (or 0.015)

Dollar deposit rate: $2\% / 4 = 0.5\%$ (or 0.005)

The outcome of the hedge is therefore calculated as follows:

Tamunac Co will borrow in euros: $€1.5\text{m} / (1+0.015) = €1,477,833$

Converting to dollars at the spot rate: $€1,477,833 / 1.16 = \$1,273,994$

Tamunac Co will then deposit dollars for 3 months: $\$1,273,994 \times (1+0.005) = \$1,280,364$

A proportion of candidates did not pro-rate the annual interest rates or did not pro-rate them correctly. For example, many candidates used a pro-rated deposit rate of 5% (0.05) rather than 0.5% (0.005). Some candidates also inverted the rates and therefore incorrectly used a borrowing rate of 0.5% and a deposit rate of 1.5%.

Question five

The finance director believes that in current market conditions of the foreign country, using an interest rate option could bring additional financial benefits.

Which TWO of the following are true about an over-the-counter interest rate option?

- A. It can be traded on a financial exchange
- B. It is an agreement with a financial institution
- C. It requires payment of an initial premium
- D. It must be exercised at its maturity date

What is the correct answer?

- ✓ The correct answer is **B** and **C**

An over-the-counter interest rate option is agreed with a financial institution for a non-refundable premium which is payable in advance. The option is only exercised if it is favourable. Over-the-counter options cannot be traded on a financial exchange.

Section C

In this section we will look in detail at TWO constructed response questions from different syllabus areas. The full questions and solutions have been published and are available on the [ACCA Practice Platform](#).

Gamgee Co

This question is from section E of the syllabus, Business Finance.

Part (a) addresses syllabus item E3(d)(i); assess the impact of sources of finance on financial position, financial risk and shareholder wealth using appropriate measures, including: ratio analysis using statement of financial position gearing, operational and financial gearing, interest coverage ratio and other relevant ratios.

Part (b) addresses syllabus item E3(c); identify and discuss the problem of high levels of gearing.

Part (c) addresses syllabus item E1(d)(iii); identify and discuss methods of raising short- and long-term Islamic finance, including: Islamic financial instruments available to businesses.

Gamgee Co is a large, listed company, and we are provided with current financial information and details about its expansion plan including the two financing options. All of the information should be studied carefully before attempting to tackle the requirements.

Requirement (a)

The question stem commences with:

To aid its decision regarding which finance option to select, the board of directors wishes to see the impact of each financing option on the following three ratios for next year:

- (1) Interest cover*
- (2) Earnings per share (EPS)*
- (3) Total gearing (debt / debt + equity using market values)*

Requirement (a) is then broken down into three parts with part (i) assuming that the project is financed by the loan note issue, part (ii) assuming that the project is financed by the rights issue of equity and part (iii) asking for comments on the results in (i) and (ii) together with a recommendation.

There are a few things to consider before tackling this part:

1. The information provided needs to be read carefully and understood. It is worth remembering that the information is provided for a purpose, to assist in the answering of the question.

2. Breaking down the requirement - there are three ratios to calculate under both the loan note issue, part (a)(i), and three ratios under the rights issue of equity, part (a)(ii).
3. Presentation - calculations are required so consideration must be given to how they are presented. Both options will mean that new figures will need to be in the income statement. A suggestion as to how this should be presented appears below. It is important that all workings are shown.
4. Verbs used in the requirement for (a)(iii) – 'briefly comment' and 'recommend'. Based upon the calculated ratios, suitable comments and a justified recommendation can be made.

The full solution to the question can be found on the [ACCA Practice Platform](#), and it shows the correct approach to the calculations which should be studied. What follows is further illustration and advice to be followed for candidates preparing to sit examinations.

Requirement (a)(i) – 4 marks

(a) (i) Calculate the above three ratios for next year, assuming the project is financed by the loan note issue (option 1).

(4 marks)

Gamgee is proposing an expansion plan involving an investment of \$360m, which will earn an operating profit of \$64.8m. This is in addition to current operations, and not in place of them.

Such an expansion will increase the operating profit and will increase the finance costs when loan notes are used. It is advised that candidates set out the changes to the income statement in conventional form e.g.

D5				=-B5*D4
	A	B	C	D
1	(a) (i)			\$m
2	Profit before interest and tax (\$177m + \$64.8m)			241.8
3	Finance costs (interest) (($\$450\text{m} \times 6\%$) + ($\$360\text{m} \times 5\%$))			-45.0
4	Profit before tax			196.8
5	Taxation	20%		-39.4
6	Profit after tax			157.4

D5 =-B5*D4				
	A	B	C	D
1	(a) (i)			\$m
2	Profit before interest and tax (\$177m + \$64.8m)			241.8
3	Finance costs (interest) ((\$450m x 6%) + (\$360m x 5%))			-45.0
4	Profit before tax			196.8
5	Taxation	20%		-39.4
6	Profit after tax			157.4

Here, we can clearly see the effect of both the additional profit of \$64.8m and the cost of the additional finance of \$18m (5% x \$360m). Efficient use of the spreadsheet cells will enable the recalculation of profit before tax, taxation at 20% and profit after tax (PAT).

(It is appreciated that the calculation of PAT could be executed in one cell only, but laying out the workings in the organised manner shown above is beneficial)

Interest cover

Now, we are in a good position to calculate interest cover:

$\$241.8\text{m} / \$45\text{m} = \mathbf{5.4 \text{ times}}$.

EPS

Next, we can approach the calculation of EPS, noting that the number of shares is unchanged when the project is financed under the loan note issue:

$\text{EPS} = \text{PAT} / \text{Number of shares} = \$157.4\text{m} / 800\text{m} = \0.19675

(rounded to **\$0.20** in the suggested solution).

Some candidates did not calculate PAT, and therefore could not score the marks for EPS. The calculation of EPS using operating profit is technically incorrect.

Total gearing

Finally, the gearing ratio can be calculated using the formula given in both the case and the requirement i.e. debt / (debt plus equity) using market values.

The debt increases from the original value of \$450m due to the loan note issue raising \$360m:

$\$450\text{m} + \$360\text{m} = \$810\text{m}$

The equity needs to be valued at market value.

The number of shares in issue is unchanged at 800 million.

But the value of each share will change as a result of the new project and this is where careful study of the information in the case is needed, as it is stated that the P/E ratio is 8 and will remain unchanged.

Therefore, the new market value per share can be calculated:

$$\text{P/E ratio} \times \text{EPS} = 8 \times \$0.20 = \$1.60$$

Hence, with 800m shares in issue, the new market value of equity is:

$$\text{Market value per share} \times \text{number of shares} = \$1.60 \times 800\text{m} = \$1,280\text{m}$$

(Alternatively, the market value of equity can be calculated by using the PAT:

$$\$157.4\text{m} \times 8 = \$1,262.4\text{m}.$$

There is a difference due to the EPS having been rounded up to \$0.20)

Some candidates did not realise that the EPS figure was required in the calculation of the market value of equity, and incorrectly assumed that the market price per share would be unchanged at \$1.20 (\$0.15 x 8).

Now the gearing ratio can be correctly calculated using the debt and equity values above:

$$D / (D+E) = \$810\text{m} / (\$810\text{m} + \$1,280\text{m}) = \$810\text{m} / \$2,090\text{m} = \mathbf{38.8\%}$$

Requirement (a)(ii) – 4 marks

(a) (ii) Calculate the above three ratios for next year, assuming the project is financed by the rights issue of equity (option 2).

(4 marks)

This requirement should be approached in the same manner as (a)(i), but the key difference is that the new project is financed via a right issue of equity and not via debt.

The extract from the income statement can be recalculated:

D5				=-B5*D4
	A	B	C	D
1	(a) (ii)			\$m
2	Profit before interest and tax (\$177m + \$64.8m)			241.8
3	Finance costs (interest) (\$450m x 6%)			-27.0
4	Profit before tax			214.8
5	Taxation	20%		-43.0
6	Profit after tax			171.8

Interest cover

Now, we can recalculate interest cover:

$\$241.8\text{m} / \$27\text{m} = \mathbf{9.0 \text{ times}}$ (rounded).

EPS

As in (a)(i), then we can approach the calculation of earnings per share (EPS), noting that the number of shares changes as the project is now financed by a rights issue of equity.

The case states that under option 2, a rights issue of equity will be at a 25% discount to the current share price, which can be shown as 75% of the current share price:

$75\% \times \$1.20 = \0.90 per share

With \$360m of new finance needed, the number of new shares can be calculated:

$\$360\text{m} / \$0.90 \text{ per share} = 400\text{m shares}$.

Therefore, the total number of shares after the rights issue:

$800\text{m issued shares} + 400\text{m new shares} = 1,200\text{m shares}$.

EPS can now be calculated:

$\text{EPS} = \text{PAT} / \text{Number of shares} = \$171.8\text{m} / 1,200\text{m} = \mathbf{\$0.14}$ (rounded)

As in (a)(i), some candidates did not calculate PAT, and therefore could not score the marks for EPS. To restate, the calculation of EPS using operating profit is technically incorrect.

Total gearing

Finally, the gearing ratio can be calculated using the formula given in both the case and the requirement i.e. $\text{debt} / (\text{debt plus equity})$ using market values.

The debt is unchanged at the original value of \$450m as given in the case.

The equity needs to be valued at market value.

The number of shares in issue is now 1,200 million.

As in (a)(i), the value of each share will change as a result of the new project and, once again, this is where the stated P/E ratio of 8 is needed.

Therefore, the new market value per share can be calculated:

$\text{P/E ratio} \times \text{EPS} = 8 \times \$0.14 = \$1.12$

Hence, with 1,200m shares in issue, the new market value of equity is:

Market value per share x number of shares = \$1.12 x 1,200m = \$1,344m

(Alternatively, the market value of equity can be calculated by using the PAT:

\$171.8m x 8 = \$1,374.4m.

There is a difference due to the EPS having been rounded down to \$0.14)

As in (a)(i), some candidates did not realise that the EPS figure was required in the calculation of the market value of equity.

Now the gearing ratio can be correctly calculated using the debt and equity values above:

$D / (D+E) = \$450m / (\$450m + \$1,344m) = \$450m / \$1,794m = \mathbf{25.1\%}$

In both (a)(i) and (a)(ii), gearing ratios using debt / equity or using book values were not creditworthy.

For parts such as these, the layout of workings is of high importance. For some candidates, this still needs improvement and too many candidates showed no workings at all, and just entered incorrect figures into a cell, with no cell formula to support the figure(s), thereby making it extremely difficult to award marks for workings.

Another question covering this topic in a similar way was Graffham Co (March/June 2023).

The technical article [‘Analysing the suitability of financing alternatives’](#), available as part of Financial Management’s [Technical Articles](#), is also of use to future candidates.

Requirement (a)(iii) – 3 marks

(a) (iii) Using the calculations from (i) and (ii), briefly comment on the results and recommend which source of finance Gamgee Co’s board of directors should choose.

The requirement here is to comment on the results from part (a)(i) and (a)(ii) and to recommend which source of finance should be used.

Better responses will contrast the increase in financial risk under the loan note issue due to lower interest cover and higher gearing with the increase in shareholder wealth shown by the rise in EPS. A comparison could then be made with the same financial indicators when the project is financed by the use of a rights issue of equity.

A justified recommendation could then be made based upon the comments, stating clearly which source of finance should be chosen.

Whilst there were some good comments and recommendations, too many candidates simply did not do enough for the 3 marks on offer.

In (a)(iii), many comments were simply mentioning that each ratio had gone up or down without stating if it was good or bad for the company, thereby failing to demonstrate FM knowledge.

Too many gave a one line answer stating that based on the ratios they should pick loan notes or rights issue without any justification or further explanation. Several responses incorrectly recommended both options when a choice was recommended.

Requirement (b) – 5 marks

(b) Discuss the problems associated with high levels of financial gearing.

This requirement was the best answered part of the question, with many candidates being able to identify more than one problem associated with high levels of financial gearing. Problems which could lead to marks being scored are set out in the suggested solution, including bankruptcy risk, agency costs/restrictive conditions, debt capacity, increase in financing costs and tax exhaustion.

Marks were awarded on the basis of one mark per valid point. Given the wording of the requirement ('problems'), it was expected that more than one problem would be discussed.

As per the suggested solution, any problem identified needed to be discussed in order to gain marks. For example, if 'increase in financing costs' was identified as a problem, a discussion similar to 'shareholders will view dividend pay-out in a highly geared company as risky as profits could be consumed by high levels of interest' would be regarded as a valid point. If developed into a discussion of how or why this is important such as 'under the risk return trade-off this will mean that shareholders in a highly geared company will require a higher rate of return, increasing the cost of equity' then a further valid point is creditworthy.

The above example illustrates the need for the required discussion to demonstrate relevant FM knowledge.

Weaker responses did not develop points in the manner suggested above or gave very brief answers, such as a list of short points when a discussion was required. Some answers did not directly address the requirement, for example just covering theories of capital structure and therefore could only gain marks on the high gearing aspects.

The problems associated with high levels of gearing also featured in the question Zeddermore Co (March/June 2021).

Requirement (c) – 4 marks

(c) Discuss TWO sources of Islamic finance that could satisfy Gamgee Co's needs for the project, taking into account the board's condition.

This part-question required candidates to identify sources of Islamic finance (IF), in particular to select two sources relevant to the circumstances of Gamgee Co.

The ACCA syllabus lists five different IF instruments available to businesses: Murabaha (trade credit), Ijara (lease finance), Mudaraba (equity finance), Sukuk (debt finance) and Musharaka (venture capital).

The case states the board's condition that 'any Islamic finance arrangement should be similar to traditional debt with no profit sharing or management involvement from the investor/Islamic bank.' Therefore, selecting sources which did not fulfil the criteria would score no marks. As the note under the suggested solution states:

"Mudaraba and Musharaka types would not be suitable as they are similar to traditional equity with profit sharing (both) and IF Institution management involvement under the Musharaka."

This leaves Murabaha, Ijara and Sukuk as relevant sources given the board's condition.

Given that there are four marks available for two sources of IF, then it is clear that a discussion sufficient for two marks is required for each selected source.

As per the suggested solution, each relevant source needed to be described correctly for one mark and then discussed in context, e.g. why the source has been selected given the board's condition, for a second mark.

For example, where Murabaha was chosen a description of the nature of the finance, 'Under a Murabaha, the Islamic Finance Institution (IFI) would purchase the assets for the project and then sell them to Gamgee Co who would pay the IFI in fixed instalments' could be supplemented by points about its similarity to traditional debt, 'a 10-year term (same as the proposed loan notes) should be possible' and lack of management involvement. 'the IFI would not have any involvement in the running of Gamgee Co.'

As with part (b) above, too many candidates did not develop points in the manner suggested above or gave very brief answers, such as simply stating two types of IF, often just two words, when a discussion was required.

Furthermore, some answers discussed IF in a more general manner such as a discussion about the eligibility of the business activities (the case states that the Gamgee's proposed activities are eligible) and/or discussion about the prohibition of the payment of interest. Neither of these points address the requirement.

The question Graffham Co (March/June 2023) featured IF, but note that Graffham required a discussion about Mudaraba and Musharaka, the two types of IF not required in Gamgee's circumstances. Nonetheless, the two questions taken together with the technical article '[Introduction to Islamic Finance](#)', available as part of Financial Management's [Technical Articles](#), are all of use to future candidates.

Elaan Co

This question is from section D of the syllabus, Investment Appraisal.

Part (a) addresses syllabus item D11; calculate net present value and discuss its usefulness as an investment appraisal method.

Part (b) addresses syllabus item D2(a); apply and discuss the real-terms and nominal-terms approaches to investment appraisal.

Part (c) address syllabus item D3(d); Apply and discuss other techniques of adjusting for risk and uncertainty in investment appraisal, including: (i) simulation, (ii) adjusted payback, (iii) risk-adjusted discount rates.

Elaan Co is currently reviewing an investment project to acquire and run a hotel. The plan is for the hotel to provide standard accommodation and a restaurant. The intention is to operate the hotel for four years and then sell it at the end of year four. We are provided with information and details about the investment in order to calculate the project's net present value. All of the information should be studied carefully before attempting the requirements.

The full solution to the question can be found on the [ACCA Practice Platform](#), and it shows the correct approach to the calculations which should be studied. What follows is further illustration and advice to be followed for candidates preparing to sit examinations.

Requirement (a) – 12 marks

(a) Using a nominal-terms approach, calculate the net present value (NPV) of the project and comment on its financial acceptability to Elaan Co.

This should be a straightforward requirement with all the information clearly provided in the scenario. There are a few issues to consider before tackling this part:

1. The duration of the investment project—this requirement is very clearly stated: “The hotel will be operated for a four-year period and then sold at the end of year four.” So, your NPV presentation should include years 0, 1, 2, 3, and 4.
2. Presentation—Calculations are required for this requirement, so consideration must be given to how they are presented. Calculations must support the decision of whether to accept or reject based on the calculated NPV. In addition, the requirement expected candidates to comment on the financial acceptability, so this needs to be clearly shown.
3. Breaking down the requirement, it is advisable that a separate working should be shown where it may be complex to write a simple formula in Excel to avoid errors.

Revenue

Many candidates did not calculate total room nights for 365 days, ignoring the percentage of occupancy, 365 days or both, and this affected their answers.

“The daily room rate will be \$85 for the first year and then increase by 6% per year afterwards”

Therefore, the room rate of \$85 should be in year 1 and then inflated for years 2, 3 and 4. It was important to get the calculation of accommodation right as the following figures are derived from it: restaurant revenue, variable cost, tax liability and incremental working capital.

Some candidates did not include restaurant revenue as part of the total income. One needs to develop skills in ensuring all items are addressed in the answer. This comes with practicing exam-style questions.

It is easier to work in thousands, as this will avoid input errors when using smaller numbers. Some students did use \$ million but were not consistent on all numbers and, therefore, made errors and lost marks.

Additionally, candidates can make use of the round function in the spreadsheet e.g. =round(cell,0)

Costs

Variable costs depended on the total revenue of accommodation and restaurant revenue. This caused few problems.

Fixed costs: “Incremental fixed costs are expected to be \$433,000 for the first year and then increase by 4% per year afterwards”, Just like the room rate year 1 figure, fixed costs should be \$433,000 in Year 1.

It is important to show the costs as a negative as this will avoid adding costs to taxable cash flow.

Tax liability

Some candidates included working capital and/or the residual value of \$7,600 in the taxable cash flow and therefore lost a mark for the tax liability.

TAD benefits

It was pleasing that many candidates calculated TAD benefits correctly, including the timing and the balancing allowance in year 4. However, there are still problems with dealing with residual value and hence the balancing allowance in year 4. to the inclusion of an additional sale value of \$100,000 in year 4 for fixtures.

The calculation of the correct TAD benefits in year 4 is shown below:

Balancing allowance (\$000s):	$1500 - 375 - 281 - 211 - 100$	=	533
TAD benefit year 4 (\$000s):	$533 @ 20\%$	=	106.6

Incremental working capital

This calculation depended on the total of accommodation revenue and the restaurant revenue.

Candidates easily calculated 5% of total revenue, but then the incremental working capital had problems. These included the following: timing, incorrect signs, and using an incorrect percentage.

Additionally, candidates did not click on the correct cells, contributing to more errors and not getting the full marks available for incremental working capital.

Nominal after-tax cost of capital

Questions vary here, and you may be given the nominal cost of capital or the real cost of capital or sufficient information to calculate the appropriate cost of capital

In this question, the real after-tax cost of capital is 4.8%, and the general rate of inflation is 5.0% per year; hence, using the Fisher formula, the nominal cost of capital is 10.0%:

$$((1 + 0.048) * (1 + 0.05)) - 1 = (1.1004) - 1 = 10\%$$

Time management

It is important that candidates do not spend more time than allocated to part (a). This is possibly due to the amount of work required in calculating revenue, TAD benefits, incremental working capital, and the nominal cost of capital, as well as clear presentation using Excel with narratives. This was a complicated NPV where students could go wrong in many places.

Requirement (b) – 4 marks

(b) Explain how the approach to the NPV appraisal in part (a) would change if a real-terms approach had been used.

Candidates easily scored 2 out of 4 marks here, mainly for recognising the difference between general and specific inflation, how to convert nominal cash flows to real cash flows, and how to use the real rate of cost of capital to discount the cash flows.

The requirement expected candidates to **explain** how the NPV in an investment appraisal changes if a real-term approach is used instead of a nominal approach. This is an important topic covered in the Financial Management paper, and it is crucial to have a solid grasp of the distinctions between nominal terms and real terms approaches to investment appraisal.

Syllabus item D2(a) covers the nominal terms and real terms approaches using the net present value method and necessitates an appreciation of the implications of taxation within this framework. Candidates who are not adequately prepared often struggle with this part of the syllabus.

This type of question can be numerical, a discussion, or both. However, this question specifically stated that no calculations are required. Candidates are required to understand the requirements of an exam question, so any calculations would not have scored any marks, and valuable time would have been lost.

Candidates need to clearly explain the following to score full marks:

- Difference between general and specific inflation
- Changes will be reflected in the cost of capital and the cash flows
- Effect of taxation

Cost of capital

A relationship between the nominal and the real cost of capital must be established. The cost of capital is normally given in nominal terms (this was calculated in part (a)). Hence, the

discussion may state that using the information from part (a), the real cost of capital is calculated by deflating the nominal cost of capital with the general rate of inflation. However, in this example, the real cost of capital was given (4.8%).

Cashflows

Provide an explanation of nominal cash flows i.e., current price inflated into future values with either general or specific inflation (applied in part (a)).

- Most candidates recognised that real cash flows are calculated by deflating nominal cash flows.
- Most candidates recognised that using a real-terms approach in an investment appraisal requires using the real cost of capital in calculating the NPV.

Taxation

- The annual tax liability will now need to be revised based on the real cashflows before tax.
- However, there is no change to the TAD benefits.

Finally, real cash flows are discounted using the real after-tax cost of capital, which for Elaan's project is 4.8%.

Please see the technical article on [inflation investment appraisal](#).

Requirement (c) – 4 marks

(c) Explain how simulation analysis could be used by Elaan Co in its appraisal of the hotel project AND the expected benefits of using simulation analysis.

It was very rare that all the steps of the simulation process were explained. Candidates were also expected to explain the expected benefits of using simulation analysis for Elaan Co. Many candidates seemed to lack the knowledge required to make a substantive response to this requirement. When preparing for the exam, it is important to bear in mind that all syllabus areas can be tested; therefore, a significant knowledge of the syllabus is required.

Practice the published questions and other questions on the Practice Platform and also in the materials from ACCA's Approved Content Providers and identify the learning outcomes as prescribed in the FM syllabus. This will help you with the relevant topics and what the exam will test for both the numerical and discussion questions.