

Subject: Business Finance 2

Chapter: Unit 4

Category: Practice Questions



1. Subject CT2 October 2010 Question 3

Which of the following might be classified as a systematic risk?

- A Major customer could switch to a different supplier.
- B A major product could be deemed to be unsafe.
- C Interest rates might decrease.
- D The chief finance officer could be fraudulent.

2. Subject CT2 October 2012 Question 2

An investor holds a broad portfolio of investments. Which of the following is a systematic risk which may affect the value of her portfolio?

- A One of the companies in her portfolio has changed the basis on which it prepares its financial statements, thus lowering reported profits.
- B Legislation changes, resulting in one company losing sales and going into receivership.
- C Interest rates could rise.
- D A new product launched by one of the companies in her portfolio is deemed to be a commercial failure.

3. Subject CT2 April 2013 Question 4

Which of the following best describes the cost of providing finance from retained earnings?

- A There is no cost associated with retained earnings.
- B Retained earnings are less expensive than equity share capital.
- C Retained earnings are equally expensive as equity share capital.
- D Retained earnings are more expensive than equity share capital.

4. Subject CT2 September 2013 Question 2

Which of the following is an unsystematic (specific) risk?

- A Interest rates may change.
- B Company directors may make bad decisions.
- C Consumer demand can be affected by global economic cycles
- D Basic commodity prices can change.

5. Subject CT2 April 2014 Question 6

A quoted company's statement of financial position shows equity shares worth £10m, retained earnings of £20m and non-current liabilities in the form of a £15m nominal loan paying 7% pa interest.

The shares have a total market value of £48m and the non-current liabilities have a market value of £18m.

The company's cost of equity has been determined as 17% and the cost of debt as 8%.

What is the company's weighted average cost of capital?

- A 11.60%
- B 14.00%
- C 14.27%
- D 14.55%



6. Subject CT2 April 2014 Question 7

A speculator has a policy of investing all of his cash in a single company for a short period in the hope of achieving a capital gain. The speculator is presently looking for a company whose shares have a high beta coefficient.

Which of the following is the most rational explanation for the speculator's desire to identify a high beta security?

- A High beta securities tend to increase in value.
- B Specific risks can be diversified away and only systematic risks matter.
- C The speculator expects stock market prices to strengthen.
- D The speculator expects stock market prices to weaken.

7. Subject CT2 April 2016 Question 5

An investment project is to be evaluated on the basis of a real rate of return. What does that mean for the evaluation of the project?

- A Inflation should be ignored in predicting cashflows.
- B Inflation should be included in the predicted cashflows.
- C It is less likely that the project will be selected.
- D It is more likely that the project will be selected.

8. Subject CT2 April 2016 Question 6

A company's share price has a beta of close to zero. How should that be interpreted?

- A Beta cannot be zero, so the figure has been calculated incorrectly.
- B The company is not sensitive to the factors that affect the market generally.
- C The company's shares would make an unattractive investment.
- D There is no risk associated with investing in that company.

9. Subject CT2 April 2016 Question 7

A company's beta coefficient is 1.6 and it has a 30% gearing ratio. How would beta change if the corporation tax rate increased?

- A Any change in beta would depend on the market's reaction.
- B Beta would decrease.
- C Beta would increase.
- D Beta would remain the same.

10. Subject CT2 April 2007 Question 1

A project has an internal rate of return of 12% It has a positive net present value at 10%. The project will be funded by means of the issue of loan stock, which the company is committed. The finance raised from the loan stock issue will cost 8% per annum. If the Company doesn't invest in the project then it will invest the proceeds in a financial instrument which carries a rate of return of 6% per annum. What is the opportunity cost of investing in this project?

A. 6%



- B. 8%
- C. 10%
- D. 12%

11. Subject Ct2 April 2007 Question 5

Which of the following is the most appropriate basis for determining the required rate of return on a major project being considered by a quoted company?

- A. The company's weighted average cost of capital (WACC)
- B. The interest rate on the bank loan raised in order to finance the project
- C. A specific rate of the project determined according to the project's total risk
- D. A specific rate of the project determined according to the project's systematic risk

12. Subject CT2 April 2008 Question 6

A project has a positive net present value when the cashflows are discounted at 10%. The project has two internal rates of return of 8% and 15%. What is the most likely explanation for this set of figures?

- A. The project should be accepted if the required rate of return is more than 8%
- B. The project should be accepted if the required rate of return is more than 15%
- C. The project should be accepted if the required rate of return is between 8% and 15%
- D. The project should be accepted if the required rate of return is less than 8% or more than 15%

13. Subject CT2 September 2008 question 9

A project has very short payback period but a negative net present value. Which of the following best describes the action that should be taken?

- A. The project should be accepted.
- B. The project should be rejected.
- C. The project should be accepted only if the company has limited funds for investment.
- D. The project should be accepted only if it is necessary for some other reason, such as meeting mandatory health and safety requirements.

14. Subjects CT2 September 2009 Question 9

A project has a very small positive net present value. Investing in this project will not prevent the company from investing in any of the other opportunities that are available to it. Which of the following best describes the manner in which the company should proceed?

- A. The project should be accepted because it is generating an acceptable rate of return.
- B. The project should be accepted because it will not involve a great deal of risk.



- C. The project should be rejected because it will not increase shareholder wealth by very much.
- D. The project should be rejected because the cash could be put to better use.

15. Subject CT2 October 2010 Question 9

A company has to choose between two competing projects. Which of the following decision criteria will definitely maximize shareholder wealth?

- A. Choose the project that has the lower risk.
- B. Choose the project with the higher internal rate of return.
- C. Choose the project with the higher net present values.
- D. Choose the project with the shorter payback period.

16. Subject CT2 October 2011 Question 4

Which of the following best describes the effects of an increase in the risk characteristics of a project when evaluating its net present value?

- A. The discount rate increase and the net present value increase.
- B. The discount rate increase and the net present value decrease.
- C. The discount rate remains constant, But the present value decreases.
- D. The discount rate decrease and the present value decreases.

17. Subject CT2 October 2011 Question 7

The payback method of evaluating a project can lead to the wrong decision being made because.

- A. It ignores income beyond the payback period.
- B. The payback period is difficult to calculate.
- C. The return in later years are uncertain.
- D. Of the emphasis placed on the insert factor.

18. Subject CT2 April 2012 Question 5

The net present value criterion is generally claimed to provide the most consistent and relevant basis for the selection of investment projects. Which of the following situation creates the greatest threat to the validity of the evaluating projects using net present value in practice?

- A. Net present value ignores risk.
- B. Shareholder may disagree with the result of a net present value calculation.
- C. The calculation of net present value can lead to two solution.
- D. Managers may wish to undertake the projects for selfish reasons and could manipulate the analysis.



19. Subject CT2 October 2012 Question 3

A company manufactures car engines and buys in a large number of components from other companies. The company has a choice between two investment projects. It can build a small factory that will manufacture the most expensive components that it currently buys in from third parties. The saving on those components will be very substantial. Alternatively it can build a large factory that will manufacture all of the components that it currently buys in. There will be a saving on all components manufactured, but the amount saved on the less expensive item will be much smaller. Each investment is equally risky. Which of the following is the most likely when the internal rate of return and net present value from the two projects are compared?

- A. The small factory option has a higher IRR than the large factory option, and a higher NPV.
- B. The small factory option has higher IRR than the large factory option and a lower NPV
- C. The small factory option has a lower IRR than the large factory option and higher NPV.
- D. The small factory option has a lower IRR than the large factory option and a lower NPV.

20. Subject CT2 April 2013 Question 5

Which of the following justifies the use of the payback method for evaluating capital investment projects?

- A. Management has to predict cash flows from the projects in order to determine payback.
- B. Project with short payback are always more profitable.
- C. Project with short payback always have higher net present values.
- D. Project with short payback are always more predictable.

21. Subject CT2 September 2013 Question 3

A company has a policy of investing in projects on the basis of their internal rate of return (IRR). Which of the following is a drawback of using IRR?

- A. Positive net present value project may be rejected.
- B. High yield investment opportunities may be overlooked.
- C. IRR is more difficult to interpret than Net present value (NPV).
- D. Ranking mutually exclusive projects on the basis of IRR may give misleading results.

22. Subject CT2 September 2013 Question 4

Which of the following best illustrates an opportunity cost?

- A. Accepting a project with a negative net present value
- B. Rejecting a project with a positive net present value because of funding constrain.
- C. Understanding the project return on a potentially positive net present value project in order to adjust for risk



D. Rejecting a project with a positive net present value because it has been decided to invest the available funds in a different project

23. Subject CT2 September 2014 Question 6

A project that has been under review for some time has been modified so that the cash receipts will remain the same, but their timing will be brought forward throughout the length of the project. How will this affect the projects internal rate of return and net present value (using a positive risk discount rate)?

- A. The internal rate of return and net present value will both decrease.
- B. The internal rate of return and net present value will both increase.
- C. The internal rate of return will increase and the net present value will decrease.
- D. The internal rate of return will decrease and the net present value will increase.

24. Subject CT2 April 2015 Question 5

A new machine will cost a company £700,000 and will increase profits by £180,000 per year. The machine will be depreciated over ten years.

& QUANTITATIVE STUDIES

What is the payback period on this machine?

- A. 2 years and 10 months
- B. 3 years and 11 months
- C. 6 years and 4 months
- D. 10 years

25. Subject CT2 September 2015 Question 3

An investment opportunity involves the purchase of a machine for \$40,000. The machine will have a useful life of five years, after which time it will be scrapped. The machine will increase reported profit by \$11,000 every year for five years. The company uses straight line depreciation. The required rate of return is 8% per annum. The investment will be funded by a loan for five years with an interest rate of 6% per annum.

Calculate the net present value of this investment.

- A. \$3,923
- B. \$6,332
- C. \$35.867
- D. \$40,028

26. Subject CT2 September 2015 Question 4

A company has evaluated a large and complex investment proposal using monte carlo simulation. The simulation suggests that there is a 10% probability of a negative net present value, a 60% probability of a small



positive net present value and a 30% probability of a substantial positive net present value. How should these results be interpreted?

- A. The actual outcome will be within the upper and lower limits arising from simulation.
- B. The average outcome calculates from these figures shows how the project is likely to turn out.
- C. The project should proceed because there is only a 10% probability of a loss.
- D. The range and frequency of the expected outcomes provide a broad indication of risk.

27. Subject CT2 September 2015 Question 5

What is the most logical interpretation of a very small positive net present value determined for an investment proposal?

- A. The internal rate of return should be calculated in order to determine whether that provides further information.
- B. The investment should only consider if it also has a very short payback.
- C. The project offers slightly more than the required rate of return and so it is worth considering,
- D. The project should be disregarded because the small net present value means that it is not worth pursuing.

28. Subject CT2 April 2016 Question 8

An oil company has used a probability tree to evaluate the risks and benefits associated with drilling for oil at each of four potential locations. The probability tree shows that drilling on site Y has a positive expected net present value of \$100m, which is greater than those for sites W, X or Z, How should this be interpreted?

- A. Drilling at site Y will definitely generate further net cash inflows of \$100M,
- B. The oil company should definitely drill at site Y.
- C. The probability tree outcome should be considered before making a decision.
- D. The probability tree provides an objective basis for reaching a final decision.

29. Subject CT2 April 2016 Question 9

Risk averse individuals often buy lottery tickets despite the fact that the expected value of doing so is negative. What does this reveal?

- A. These individual are behaving in an irrational manner.
- B. The certainty equivalent of a slim chance of winning a major prize exceeds the cost of a lottery ticket.
- C. The certainty equivalent of a slim chance of winning a major prize is smaller than the cost of a lottery ticket.
- D. Lottery contestants do not understand basic probability theory.



Other questions

1. Subject CT2 April 2007 Question 19 (part)

The directors of a major quoted company have been working towards a greater spirit of openness is the interest of improving investor relations. As part of this they released a great deal of information about a major investment project that the company had committed itself to. The directors had conducted a detailed analysis and were of the opinion that the projects net present value (NPV) was worth roughly 10% of the company's market capitalization. They were, therefore disappointed that the publication of this information had little or no observable impact on the share price. The published information had not included detailed cash flows, but it should have been sufficient for shareholders to have been able to determine that the project represented a significant and profitable expansion, with a low risk.

- i. Explain why it is theoretically correct to assume that accepting a project with a positive NPV should increase the value of a company by the NPV of the project.
- ii. Explain why the movement predicted in (I) is unlikely to be the case in practice.

2. Subject CT2 September 2007 Question 19

A firm of actu<mark>aries is considering a major international expansion. They are considering investing heavily in a feasibility study in order to determine whether to open a major new office in a new country. There are many factors that would determine the success or otherwise of this. For example:</mark>

- It may prove difficult to recruit suitable actuaries and support staff for the office without offering very substantial salaries.
- It is difficult to predict how competing firms who are already established in that country will respond to the completion.
- The new host country currency is very volatile compared with the firms home currency and all profits from the new office would be earned in that host currency.
 - The feasibility study is a very costly undertaking in itself and so the firm is considering the respective merits of three options:
- Conduct a feasibility study, prior to making a decision as to whether to proceed.
- Proceed with the expansion without first undertaking a feasibility study.
- Abandon the whole idea of the expansion.
 - One of the directors of the firm has prepared a probability tree using the following assumptions:
- If the expansion goes ahead it will yield either of the following outcomes: Success [with a positive net present value (NPV) of £5m] and failure [with a negative NPV of £2m]
- The feasibility study will cost £100,00 and will have an 80% probability of correctly predicting the outcome of the expansion.



- There is a 70% probability that the feasibility study will indicate that the expansion will succeed and a 30% probability that it will indicate failure.
- If the expansion proceeds without the feasibility study then it has a 62% probability of success and a 38% probability of failure.

This assumption yielded the following probability tree:

The director who prepared this diagram claims that it indicates that the expansion is likely to prove successful, but that the firm should undertake the feasibility study nevertheless.

Another director has prepared a simulation of the investment and has simulated the outcome of proceeding for 10,000 cycles. This suggests that the expected net present value of the expansion is negative, whether the feasibility study is conducted or not.

- i. Explain why the probability tree suggests that the firm should conduct the feasibility study, even though the expansion is likely to be a success.
- ii. Explain when it might be appropriate to use a probability tree in the evaluation of a capital investment project.
- iii. Explain why the other director's simulation exercise may be more reliable than the probability tree.
- iv. Describe the prerequisites of a "successful" simulation of a capital investment project.
- v. It has been suggested that managers often use capital investment appraisal techniques in order to justify decision that they have already taken. State with reasons, whether or not you agree with this suggestion.

3. Subject CT2 April 2008 Question 15

A company's board of directors is revising the company's investment appraisal criteria. The directors have asked for an explanation of the concept of opportunity cost and the manner in which it might impact on the selection of projects.

Outline the points you would make.

4. Subject CT2 September 2008 Question 11

A company director is unable to decide whether to invest in a particular project. Discuss the extent to which a simulation exercise might help them to reach a conclusion.

5. Subject CT2 April 2009 Question 15

A company has several divisions, each of which operates on a geographical basis and in the same line of business. Divisional managers can submit proposals for capital investment projects for consideration by senior management at head office. An analysis of proposals received in the past three years indicates that some divisional managers submit far more proposals than others and that some divisional managers are consistently more optimistic than others in their proposals.

Explain why such behavior might occur and why it creates problems for companies.



6. Subject CT2 April 2009 Question 20 (part)

You have been asked to clarify a number of matters for the board of directors of a major company that is considering a massive investment. The directors have decided that all majors' investments will be evaluated in terms of their net present value (NPV) and that NPV will be determined in a relevant and meaningful manner. Unfortunately, they cannot agree on the application of the best way to calculate NPV.

The company has a beta coefficient of 1.6. It has a market capitalization of £60million. The company is financed entirely by equity. The directors believe that their high beta coefficient has depressed that market capitalization and so they wish to invest in some new lines of business.

The directors are considering an investment that will reduce the company's beta. They intend to borrow £20 million at an interest rate of 8%. They intend to invest the whole amount in a new business venture that is significantly different from the present business. This venture is in a business area where companies traditionally have beta coefficients of approximately 1.1, although the directors feel that the business is so different from the existing industry that there is an even greater diversification effect.

The directors are considering evaluating the NPV of the investment in terms of the company's present cost of equity, although two members of the board believe that this rate is theoretically incorrect. One board members believes that the cost of equity will be affected by the investment and that it should be used in place of the present rate and another believes that the weighted average cost of capital, revised to allow for the fresh investment and the new borrowing, should be used,

The risk-free rate of return is 4%. The market risk premium is 6%. The company's effective tax rate is 28%.

- (i) (A) Discuss the appropriateness of the directors decision to determine the NPV of the proposed investment in terms of one or other of the measures of the company's cost of capital.
- (B) State with reasons, whether there is a more appropriate rate that should be used instead
- i. Explain why the directors are mistaken in their belief that their investment in this new venture is even more worthwhile to the shareholders because of the additional diversification effect that it carries

7. Subject CT2 September 2009 Question 16

Explain how the shareholder value approach to capital project appraisal relates to more traditional net present value approaches.

8. Subject CT2 September 2009 Question 20 (part)

The directors of Homevac plc are considering a major investment proposal. The company was established 12 years ago to manufacture innovative consumer goods such as food mixers that enable amateur cooks to produce professional results. The company was founded by Lvy Lee, who invented the basic product range. Much of the company's factory is in a developing country where labour is relatively inexpensive. The net



present value of this proposal is positive under a range of assumptions about costs and revenues including the worst likely case and using a realistic discount rate.

Ms Lee is concerned about this proposal on two grounds:

- Homevac plc makes most of its sales in its home country and has been successful in part because the
 company is very strongly identified as a "local business". She feels that there are risks that cannot be captured
 in a typical discounted cashflow analysis and that a higher-level risk analysis should be conducted.
- All of her wealth is tied up in the company. She is not opposed to relocating the factory in principle, but she would require far more than a "realistic rate of return. She wishes the proposed investment to be evaluated at a required rate of return of 25%
 - i. Explain why it might be appropriate for the directors to identify the major higher Level risks that might affect the outcome of this project.
 - ii. Outline the main risks facing this project.
 - iii. Explain why it might be reasonable for Ms Lee to require a higher rate of return than one that had been determined by traditional investment appraisal techniques.

9. Subject CT2 April 2010 Question 15

A small company engaged a firm of consultants to evaluate a very complicated investment opportunity. The consultancy devised a monte carlo simulation and ran a very large number of iterations. They discovered that the project generated a positive net present value for 85% of the simulation. The directors of the company believe that this result is sufficient for them to justify investing in the project.

Explain how the directors should go about interpreting the results of this simulation before making a final decision on the project.

10. Subject CT2 April 2009 Question 20 (part)

You have been asked to clarify a number of matters for the board of directors of a major company that is considering a massive investment. The directors have decided that all major investments will be evaluated in terms of their net present value (NPV) and that NPV will be determined in a relevant and meaningful manner. Unfortunately, they cannot agree on the application of the best way to calculate NPV.

The company has a beta coefficient of 1.6. It has a market capitalisation of £60 million. The company is financed entirely by equity. The directors believe that their high beta coefficient has depressed the market capitalisation and so they wish to invest in some new lines of business.

The directors are considering an investment that will reduce the company's beta. They intend to borrow £20 million at an interest rate of 8%. They intend to invest the whole amount in a new business venture that is significantly different from the present business. This venture is in a business area where companies traditionally have beta coefficients of approximately 1.1, although the directors feel that the business is so different from the existing industry that there is an even greater diversification effect.

The risk-free rate of return is 4%. The market risk premium is 6%. The company's effective tax rate is 28%.



- (i) Use the capital asset pricing model (CAPM) to:
- (a) Calculate the company's present cost of equity.
- (b) Estimate the company's ungeared beta, assuming that it proceeds with the investment.
- (c) Estimate the company's geared beta, assuming that it proceeds with the investment.
- (d) Determine the company's weighted average cost of capital to proceed with the investment, using the results of your other calculations and estimates.

11. Subject CT2 October 2010 Question 16

- (a) Explain the implications for the weighted average cost of capital if a company's ordinary share price decreases.
- (b) Explain how this will affect the company's strategy for investing in capital projects.

12. Subject CT2 October 2012 Question 20

Hatton is a quoted company in the entertainment industry. The company's directors are extremely ambitious and strive to maximise Hatton's rate of growth. The directors have identified the availability of finance as the company's biggest constraint.

The directors have been offered the opportunity to invest in two projects, each involving the development of a new games console. The projects involve competing products and so they are effectively mutually exclusive because there would be no commercial justification in investing in both.

Project A requires an investment of £20 million and has a projected net present value of £80 million. Project B requires an investment of £50 million and has a projected net present value of £200 million. Hatton does not have any spare cash and so it will have to raise finance in order to invest in either project.

The directors of Hatton are unable to decide which of the two investments is better for the company. Each is relatively risky, but the two projects are exposed to virtually the same factors that will determine success or failure and, in that sense, the risks are virtually identical.

Hatton is heavily geared. The company's equity has a book value of £900 million and its debt has a book value of £350 million. Hatton made a large share issue last year and the directors do not believe that they could seek further equity in the short term. The company's debt includes a major loan from a commercial bank that carries a debt covenant under which the loan is repayable in the event that gearing (measured as debt as a percentage of total finance) exceeds 30%.

Hatton's marketing director is keen to proceed with Project B on the basis that it offers the greatest opportunity to enhance the company's share price.

Hatton's chief executive is keen to proceed with Project A on the basis that it will be possible to finance that project without taking the company to the very brink of its debt covenant.

Hatton's finance director has urged caution and recom ends refusing both opportunities on the grounds that the only cost of doing so is the opportunity cost. His reasons for this recommendation is that the company is already heavily involved in the games business and it might be better to diversify into other areas of entertainment. In his opinion, refusing the projects will not risk harm to Hatton's share price.

- (i) Outline the reasons why a bank might impose a debt covenant such as that affecting Hatton's borrowing capacity.
- (ii) Discuss the risks associated with Hatton permitting its borrowings to rise to the maximum gearing level agreed with its bank.
- (iii) Discuss the validity of comments made by the finance director that:



- (a) the share price will not be harmed by the opportunity cost associated with turning down an investment project with a positive NPV.
- (b) the share price could be improved by Hatton diversifying its investment base.

13. Subject CT2 April 2013 Question 11

Explain whether a loss-making company should allow for the effects of tax when deciding whether to raise fresh finance through debt or equity.

14. Subject CT2 April 2013 Question 20

Partan is a quoted company. The directors have asked for a report on the company's cost of capital. The following information has been provided:

- The market capitalisation of the company's equity is £600 million.
- The company has debentures with a face value of £250 million. Their market value is £220 million.
- The corporation tax rate is 23%.
- The risk-free rate of interest is 4% per annum.
- The ungeared beta on Partan's equity is 1.3.
- The debentures have a coupon rate of 5% and are redeemable at par in five years' time.

The market rate of return is 9% pa.

The directors have already calculated Partan's weighted average cost of capital (WACC), but they want you to prepare a calculation in order to confirm their figures. They are concerned that the WACC is higher than they think is justified and they wish to discuss some proposals for reducing the figure because the directors plan to raise further finance in order to fund expansion, but they are unwilling to do so if the cost of capital is overstated.

- (i) Determine Partan's cost of equity using the company's geared beta.
- (ii) Determine Partan's approximate cost of debt.
- (iii) Calculate Partan's WACC.

The marketing director has suggested that the company could dramatically reduce the cost of capital if the board promotes the company in the same way that it promotes its products. The directors should identify the market's needs and explain to those who provide finance just how well suited Partan is to meeting those needs.

(iv) Discuss the logic of the marketing director's proposal for reducing the WACC.

15. Subject CB1 September 2020 Question 9

What is implied by a beta of zero on a potential investment?

A The investment is high risk.

B The investment is risk free.

C The investment will make a diversified portfolio less sensitive to movements on the market.

D The investment will make a diversified portfolio more sensitive to movements on the market.



16. Subject CB1 September 2020 Question 16

Discuss the proposition that the cost of equity is zero for an unquoted company because there is no observable share price.

17. Subject CT2 April 2018 Question 5

An investor cannot afford to construct a properly diversified portfolio. Which of the following best describes the significance of the beta of potential investments to that investor?

A Betas have no use whatsoever to this investor.

B Low beta investments will be a safer investment for this investor.

C The investor should focus on high beta stocks if she believes that the stock market will rise.

D The beta co-efficient remains just as relevant even when the investor cannot hold a diversified portfolio.

18. Subject CT2 September 2018 Question 20

Doron is an unquoted company which was founded 12 years ago and which has grown steadily since. Its directors are considering an investment opportunity that will increase the productive capacity of the business by 30%.

Doron was established using the savings of its three founders, who now comprise the company's board of directors. Each of the three founders owns one third of the company's equity. Doron's growth has been funded using retained earnings and the proposed expansion will be funded in the same way. The company has no debt. None of the founders has any other significant personal assets apart from their shares in Doron and their family homes.

The founders are considering more sophisticated approaches to the evaluation of capital investment projects. They have asked you to determine Doron's cost of equity.

They have established the following facts:

- The risk free rate is 4% per annum.
- The equity risk premium is 10% per annum.
- The beta coefficient of a quoted company which is in the same industry as Doron is 1.4.
- The above quoted company has a debt:equity ratio of 0.6:1.
- The corporation tax rate is 20%.
- (i) Calculate Doron's cost of equity.
- (ii) Discuss the relevance of the rate that you calculated in part (i) to the evaluation of the project to expand Doron.
- (iii) Discuss the relevance of the rate that you calculated in part (i) to the three founders.