Chapter 02 Testbank

Student: _____

1. Fisher's separation theorem shows important relationships between:

   A. companies and the capital market.

   B. shareholders and the capital market.

   C. companies and shareholders.

   D. companies, their shareholders and the capital market.

2. To calculate a project's net present value (NPV), the project's required rate of return is used to:

   A. compound cash flows to their future values.

   B. convert future cash flows to their equivalent values today.

   C. compute the weighted average cost of capital to discount the cash flows.

   D. convert the non-operating cash flows into operating cash flows.

3. The curve that displays the investment opportunities and outcomes available to the company is the:

   A. production probability curve.

   B. production cost curve.

   C. production possibilities curve.

   D. production value curve.

4. The assumed overall financial objective of a company is to:

A. raise capital.

B. reduce debt.

C. maximise profits.

D. maximise the market value of its ordinary shares.

5. The curve showing a set of combinations that an individual derives equal utility from any combinations in the set is the:

A. indifference curve.

B. production possibilities curve.

C. production frontier curve.

D. differential curve.

6. The line that shows the combinations of current and future consumption that an individual can achieve from a given wealth level using capital market transactions is the:

A. capital market line.

B. market opportunity line.

C. market line.

D. consumption opportunity line.

7. What is the role of the capital market in Fisher's Theorem?

A. To ensure there is no simple decision rule that will satisfy all shareholders.

B. To increase the market interest rate.

C. To allow for a transfer between current and future resources.

D. To provide a market for companies to employ highly skilled individuals.

8. A number of implications for investment, financing and dividend decisions can be drawn from Fisher's analysis. In terms of financing decisions Fisher's analysis states that:

A. the nominal rate is the true interest rate.

B. there is a single market interest rate.

C. the real rate is the true interest rate.

D. there are multiple market interest rates.

9. Fisher's separation theorem means that a company can make investment decisions with which:

A. no shareholders will agree.

B. most firms in the capital market will agree.

C. every shareholder will agree.

D. None of the given options as Fisher's analysis does not have any implications for the investment decision.

10. Pursuing a goal of maximising the market value of a company's shares is easy when:

A. dividends are growing at a constant rate.

B. there is limited uncertainty.

C. there are limited market imperfections.

D. there are no market imperfections and no uncertainty.

11. When there is uncertainty, the effect on the share price due to decisions made by managers:

A. is no longer perfectly predictable.

B. can only be predicted by Fisher's separation theorem.

C. can only be predicted by the market opportunity line.

D. can be predicted by Fisher's separation theorem, but only to a limited extent.

12. In Fisher's analysis of investment and consumption, the market opportunity line defines the:

A. combination of investment opportunities for the firm to increase market share and growth opportunities.

B. potential new market opportunities for the firm and new product options established by appropriate research.

C. options for consumption by the firm relative to the investment of the shareholders who own the firm.

D. combinations of consumption possibilities consistent with the initial wealth of the investors in the firm.

13. A company has $25 million in cash and the interest rate is 12%. The company has decided to invest $20 million in assets, and the investment has a net present value of $5 million. What is the wealth of the company's shareholders immediately after the investment plan is announced?

A. $30 million.

B. $10 million.

C. $28 million.

D. $25 million.

14. In Fisher's analysis of investment and consumption, the participants include:

A. the firm's finance director, the firm's banker and the stock exchange.

B. the firm's management, market analysts and the financial press.

C. the firm's management, the firm's owners (shareholders) and the capital market.

D. the firm's general manager, the firm's finance director, and the capital market.

15. Under Fisher's separation theorem, the key factor that affects the way in which financial decisions are made is that:

A. it is critical that there are effective capital markets in place to allow firms to borrow from those lenders who choose the greater security of debt rather than equity.
B. regardless of an individual shareholder's preference between investment and consumption, there is an identifiable single decision for the firm that all shareholders will support.
C. shareholders are effectively separated from all decisions of the firm, in that they have no interest in the outcome of those decisions.
D. each and every shareholder's preference between investment and consumption is effectively separate in determining the activities of the firm.

16. Given a perfect capital market and perfect certainty, the firm will always undertake a project where:

A. the future rate of return on the project is greater than the interest rate available in the capital market.
B. the future rate of return on the project is less than the interest rate available in the capital market.
C. the current rate of return on the project is less than the return available on projects undertaken by competitors.
D. the current rate of return on the project is greater than the opportunity cost of forgone consumption.

17. An important implication of Fisher's separation theorem is that:

A. while the level of investment will depend on management decisions (independent of shareholders' wishes), shareholders will have a preference for given levels of dividend.
B. shareholders and firm management will have separate interests and directions in decisions on investment, financing and especially dividends, and these have come to be known as an agency problem.
C. the extent to which a firm should invest can be determined by a simple rule.
D. the extent of investment undertaken will determine the amount of finance to be raised, and whether that finance will be debt or equity.

18. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Calculate the rate of return on Project Mini.

A. 11.1%

B. 0%

C. 25%

D. –20%

19. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Calculate the rate of return on Project Normal.

A. 14.3%

B. 120.0%

C. 13.6%

D. 150.0%

20. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Calculate the rate of return on Project Mega.

A. 19.4%

B. 19.2%

C. 16.1%

D. 23.1%

21. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. The optimal decision would be to accept:

A. Project Mini.

B. Project Mega.

C. Projects Mini and Normal.

D. Projects Normal and Mega.

22. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Assume the company has four equal shareholders (A, B, C and D), and has chosen Project Mega for investment. Suppose Shareholder A wishes to consume $50 now. What is her required repayment in the later period?

A. $12.50

B. $56.00

C. $14.00

D. $42.00

23. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Also assume the company has four equal shareholders (A, B, C and D), and has chosen Project Mega for investment. What amounts will Shareholder A have to finance her consumption in the later period, after consuming $50 in the first period?

A. $151.75

B. $181.25

C. $193.75

D. $179.75

24. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. What is the NPV of Project Mini?

A. ($92.86)

B. ($3.57)

C. $396.43

D. $4.06

25. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. What is the NPV of Project Normal?

A. $66.96

B. $75.00

C. $8.04

D. $258.04

26. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period, and that the company has four equal shareholders (A, B, C and D). Also assume the company has chosen Projects Normal and Mega for investment. Suppose Shareholder B wishes to consume $165 now. What is his required repayment in the later period?

A. $65

B. $165

C. $72.80

D. $184.80

27. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Also assume that the company has four equal shareholders (A, B, C and D). Will the shareholders support the company's decision to invest in Projects Normal and Mega instead of just Project Mega?

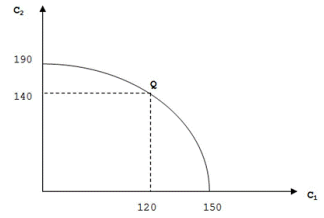
A. No, only Shareholder B will support such a decision.

B. We cannot tell, as no information has been provided with regards to the consumption choices of Shareholders C and D.

C. Both Shareholders A and B will support this decision but we need to know the consumption choices of Shareholders C and D before being able to identify their preferences.

D. All the shareholders will support the company's decision.

28. Consider the following production possibilities curve:



Point Q represents:

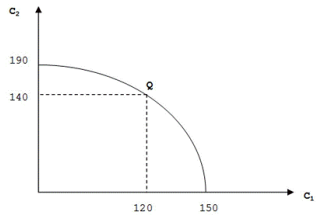
A. an intermediate case in which a dividend of 30 units is paid at Time 1.

B. an intermediate case in which 30 units is invested at Time 1.

C. an intermediate case in which a dividend of 50 units is paid at Time 2.

D. none of the given options.

29. Consider the following graph.



Which of the following statements is false?

A. The Company has 150 units of resources available to it.

B. The point (150,0) represents a dividend payment of zero units at Time 1.

C. 190 units would be available for consumption at Time 2 if no dividend were paid at Time 1.

D. None of the given options is false.

30. Indifference curves are normally:

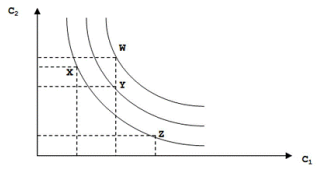
A. convex, which means they approach the horizontal axis as the level of C_2 increases.

B. concave, which means they approach the vertical axis as the level of C_2 increases.

C. convex, which means they approach the horizontal axis as the level of C_1 increases.

D. concave, which means they approach the vertical axis as the level of C_1 increases.

31. Consider the following set of indifference curves:



Investment Y is:

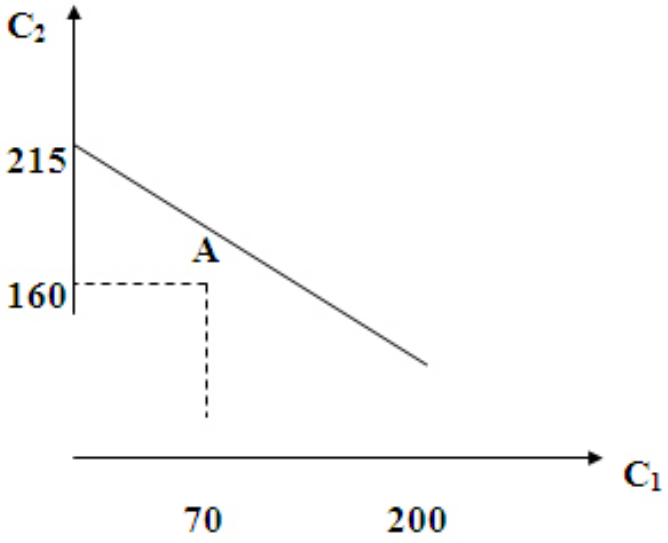
A. preferred to Investments X and Z and is as desirable as Investment W.

B. preferred to Investment W, but is inferior to Investments X and Z.

C. preferred to Investments X and Z, but is inferior to Investment W.

D. preferred to Investments X and Z, which provide an investor with equal utility, and is preferred to Investment W.

32. Consider the following graph:



What is the interest rate per period?

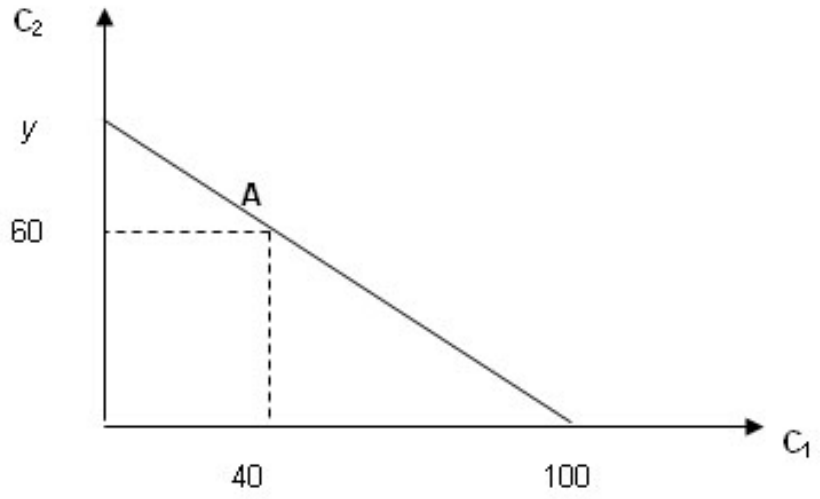
A. 7.31%

B. 7.14%

C. 7.50%

D. 25.00%

33. Consider the following graph:



Assume that the interest rate per period is 15 per cent. Calculate *y*.

A. 115 units

B. 106 units

C. 92.17 units

D. 100 units

34. Which of the following correctly represents the equation of a market opportunity line?

A. $C_1 = [W_1(1 + i) + C_2]/(1 + i)$

B. $C_1(1 + i) = W_1(1 + i) + C_2$

C. $W_1(1 + i) – C_2 = C_1(1 + i)$

D. $C_2 = –W_1(1 + i) + C_1(1 + i)$

35. The slope of a market opportunity line is given by:

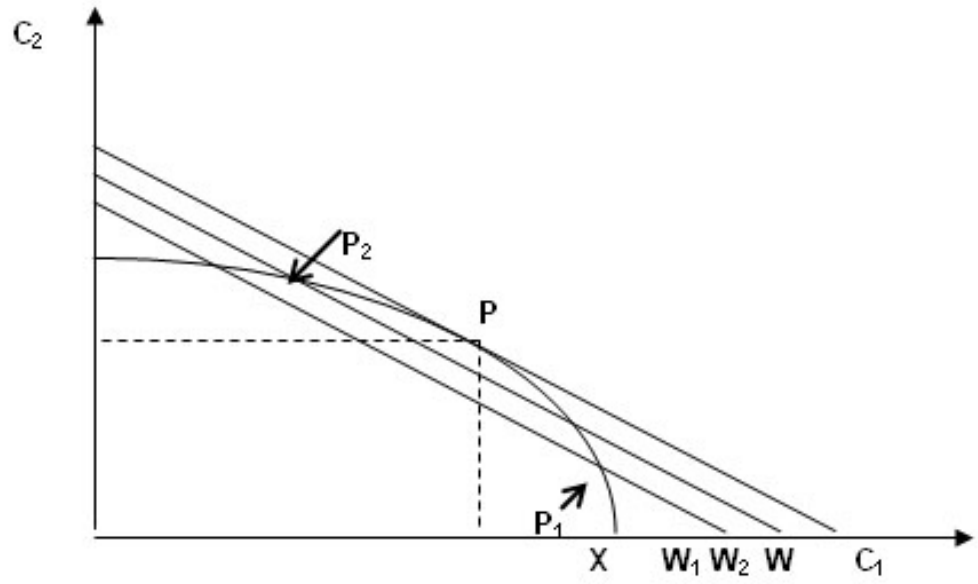
A. $–(1 + i)$

B. $C_1 /(1 + i)$

C. $C_2 + C_1(1 + i)$

D. $–C_1 /(1 + i)$

36. Suppose that a company has X units of resources and is considering three investment/dividend policies, P_1, P_2 and P. The following graph shows market opportunity lines drawn through each of these points:



The line through P_1 shows that:

A. if policy P_1 were adopted, the shareholders' wealth would decrease from W to W_1.

B. if policy P_1 were adopted, the shareholders' wealth would increase from X to W_1.

C. if policy P_1 were adopted, the shareholders' wealth would remain unchanged at W_1.

D. none of the given options.

37. Which statement is false with respect to the decision rule: accept a project if and only if [Return at Time 2 / (1 + i) - Δ] > 0?

A. The decision rule is completely consistent with Fisher's separation theorem.

B. The decision rule is the same as the net present value rule.

C. A company that always applies the decision rule to its investment decisions will be able to locate the optimal investment/dividend policy and will maximise the wealth of its shareholders.

D. None of the given options.

38. Fama (1970) outlines the sufficient conditions in order for all shareholders to agree about the exact nature of uncertainty. Which of the following statements is not one of the specified sufficient conditions?

A. There are no transaction costs in trading securities.

B. All agree on the implication of current information for the future price and distributions of future prices of each security.

C. All information is costlessly available to all market participants.

D. None of the given options.

39. Fisher's separation theorem means that:

A. a company can make an investment decision even if all shareholders do not agree.

B. a company should invest beyond the point where the net present value of the marginal unit of investment is zero.

C. a company should invest up to a point where the rate of return on the marginal unit of investment equals the market interest rate.

D. none of the given options is correct.

40. Which of the following statements is false?

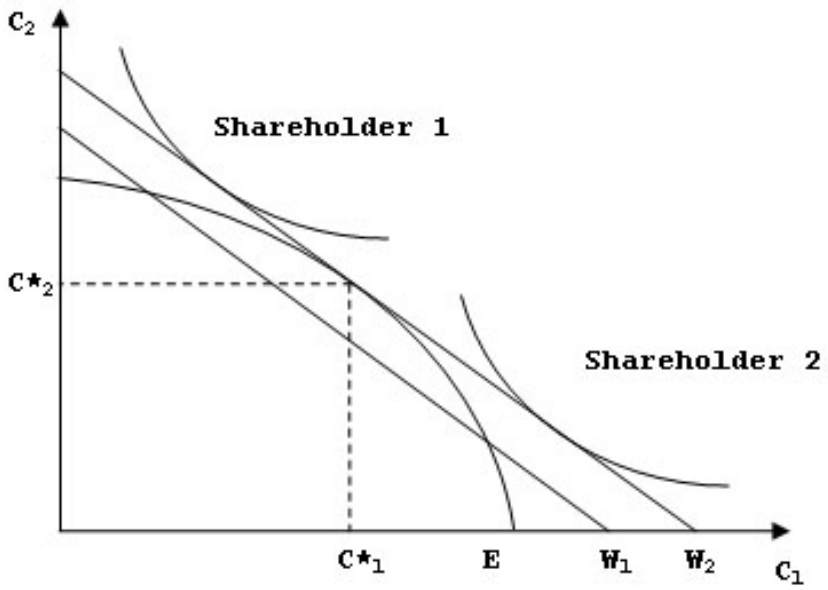
A. If there is only one market interest rate, then the value of the company and the wealth of its shareholders are independent of the company's capital structure.

B. If any one point on a market opportunity line is attainable, then all other points on the line are also attainable by borrowing or lending.

C. The dividend decision does not affect shareholders' wealth, provided that the company does not alter its investment decision.

D. None of the given options.

41. Consider the following diagram:



In this diagram, if the optimal policy is chosen, the company invests the amount:

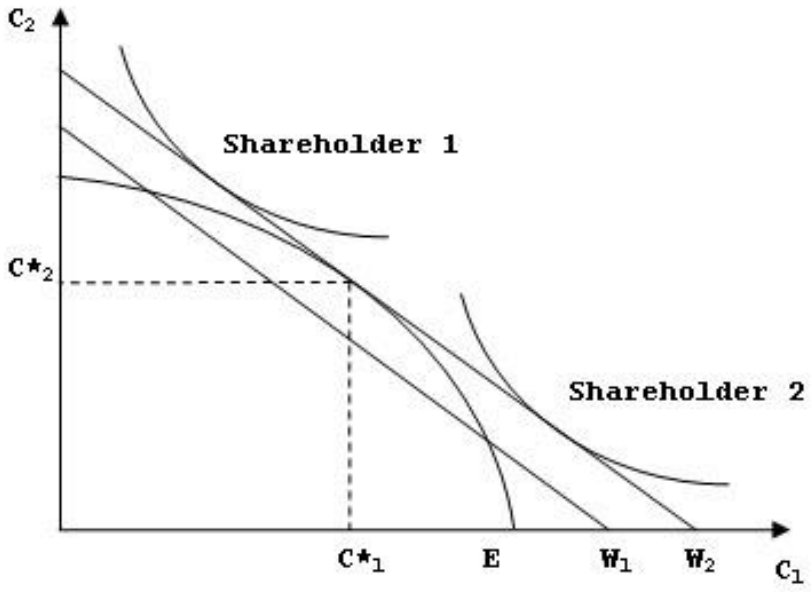
A. W_1–E

B. W_1–C^*_1

C. E–C^*_1

D. W_2–E

42. Consider the following diagram:



In the diagram, if the optimal policy is chosen then shareholder 2, with the lower indifference curve, will optimise her consumption by:

A. lending in the second period and borrowing in the first period.

B. borrowing in the first period and repaying in the second period.

C. lending in the first period and recieving in the second period.

D. borrowing in the first period and recieving in the second period.

43. In the absence of _____ companies are unable to make decisions about dividend policy that will please all share holders.

_____

44. A company can make optimal decisions to the benefit of all shareholders if they use the _____ rule to analyse investment proposals.

_____

45. An _____ is a curve that shows a set of combinations such that an individual derives equal utility from any combination in the set.

_____

46. Share prices change as a result of investors' reaction to _____ provided through investment, financing and dividend decisions made by the managers of a company.

_____

47. According to Fisher's Theorem, provided that the company does not alter its investment decision, the dividend decision does not affect _____.

_____

48. Fisher's separation theorem assumes markets have imperfections.

True False

49. Fisher's separation theorem has no implications for the investment decision.

True False

50. If a project costs $700 and is expected to return $790 to shareholders in one years time, then the rate of return on the investment is 12.86%.

True False

51. The shape of the production possibilities curve determines the combinations of current dividend, investment and future dividend that a company can achieve.

True False

52. In practice, managers are unable to predict with certainty the impact that a particular decision will have on a company's share price.

True False

53. An indifference curve represents a set of possible consumption outcomes, which yields equal utility to the individual.

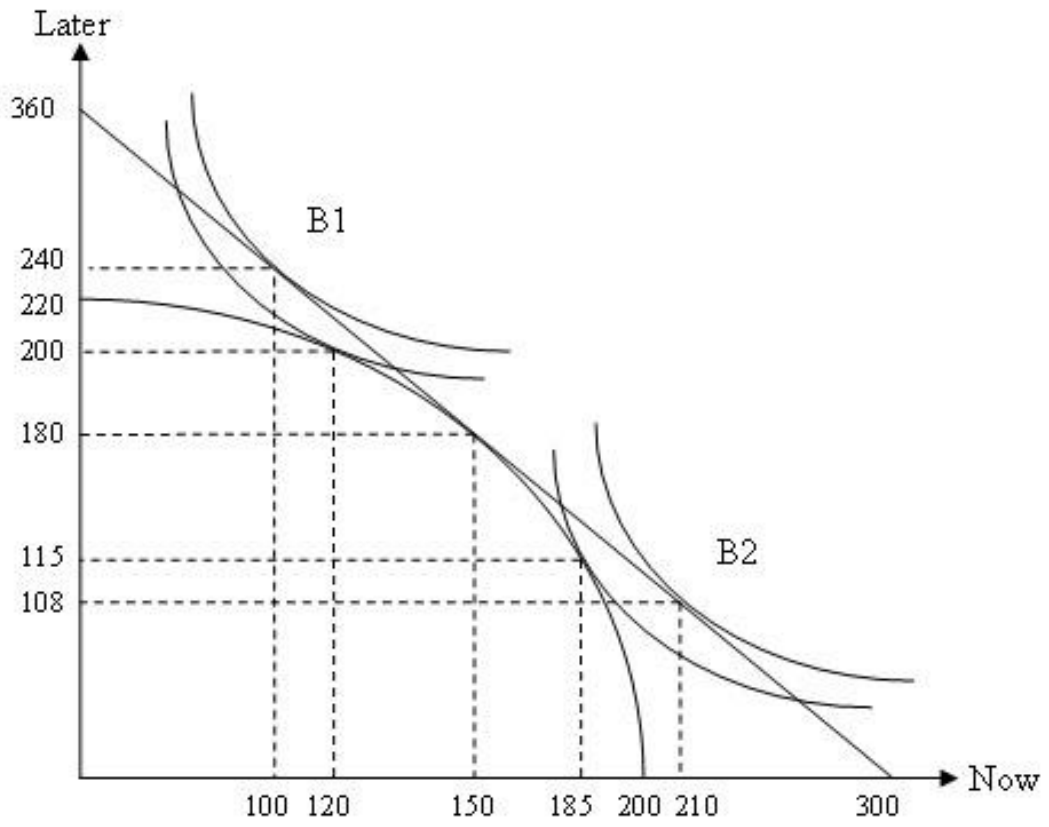
True False

54. The market opportunity line indicates the preferences of individuals for a given level of wealth.

True False

55. Define the following terms:
    (a) The production possibilities curve
    (b) An indifference curve
    (c) The market opportunity line

56. B1 and B2 are equal shareholders in the company Banana Inc. They have each invested $200 in the company. The following graph shows on a per shareholder basis the production possibilities curve, B1 and B2's indifference curves and the market opportunity line.



(a) What is the interest rate?

(b) How much is invested by the company at the optimal point?

(c) Assuming that the company invests at the optimal point, complete the following table (where applicable) for shareholder B1.

	Now	Later
Dividend	150	
Borrow/Repay		
Lend/Recieve		
Consumption		

(d) Assuming that the company invests at the optimal point, complete the following table (where applicable) for B2.

	Now	Later
Dividend	150	
Borrow/Repay		
Lend/Recieve		
Consumption		

57. The AlhpaBeta company is considering considering several investment opportunities. The interest rate for both borrowing and lending is 15 per cent per period and the investment/dividend opportunities are given in the following table:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
AOne	1250	750	1350
BTwo	1500	500	1650
CThree	2000	0	2500

(a) What is the net present value of each project?

(b) Based on the NPV rule which project(s) should the company invest in?

(c) What is the IRR of project AOne?

(d) The company has 2 equal shareholders, Alpha and Beta, and invests in the project CThree. Alpha would prefer to consume $500 today. What can she do? How much will she be able to consume later?

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B. shareholders and the capital market.

C. companies and shareholders.

D. companies, their shareholders and the capital market.

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Blooms: Knowledge

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.1 Introduction

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Section: 2.3 Fisher's Separation Theorem: a formal approach

4. The assumed overall financial objective of a company is to:

A. raise capital.

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D. maximise the market value of its ordinary shares.

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Section: 2.4 Investors' reaction to managers' decisions

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D. combinations of consumption possibilities consistent with the initial wealth of the investors in the firm.

AACSB: Analytic

Blooms: Knowledge

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

13. A company has $25 million in cash and the interest rate is 12%. The company has decided to invest $20 million in assets, and the investment has a net present value of $5 million. What is the wealth of the company's shareholders immediately after the investment plan is announced?

A. $30 million.
B. $10 million.
C. $28 million.
D. $25 million.

AACSB: Analytic
Blooms: Application
Difficulty: Hard
EQUIS: Analyse
Graduate Attributes: Problem-solving
Learning Objective: 02-03 Identify a company's optimal investment/dividend policy under conditions of certainty
Section: 2.3 Fisher's Separation Theorem: a formal approach

14. In Fisher's analysis of investment and consumption, the participants include:

A. the firm's finance director, the firm's banker and the stock exchange.
B. the firm's management, market analysts and the financial press.
C. the firm's management, the firm's owners (shareholders) and the capital market.
D. the firm's general manager, the firm's finance director, and the capital market.

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.1 Introduction

15. Under Fisher's separation theorem, the key factor that affects the way in which financial decisions are made is that:

A. it is critical that there are effective capital markets in place to allow firms to borrow from those lenders who choose the greater security of debt rather than equity.

B. regardless of an individual shareholder's preference between investment and consumption, there is an identifiable single decision for the firm that all shareholders will support.

C. shareholders are effectively separated from all decisions of the firm, in that they have no interest in the outcome of those decisions.

D. each and every shareholder's preference between investment and consumption is effectively separate in determining the activities of the firm.

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders
Section: 2.2 Fisher's Separation Theorem: a simplified example

16. Given a perfect capital market and perfect certainty, the firm will always undertake a project where:

A. the future rate of return on the project is greater than the interest rate available in the capital market.

B. the future rate of return on the project is less than the interest rate available in the capital market.

C. the current rate of return on the project is less than the return available on projects undertaken by competitors.

D. the current rate of return on the project is greater than the opportunity cost of forgone consumption.

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
Graduate Attributes: Problem-solving
Learning Objective: 02-03 Identify a company's optimal investment/dividend policy under conditions of certainty
Section: 2.3 Fisher's Separation Theorem: a formal approach

17. An important implication of Fisher's separation theorem is that:

A. while the level of investment will depend on management decisions (independent of shareholders' wishes), shareholders will have a preference for given levels of dividend.

B. shareholders and firm management will have separate interests and directions in decisions on investment, financing and especially dividends, and these have come to be known as an agency problem.

C. the extent to which a firm should invest can be determined by a simple rule.

D. the extent of investment undertaken will determine the amount of finance to be raised, and whether that finance will be debt or equity.

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

18. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Calculate the rate of return on Project Mini.

A. 11.1%

B. 0%

C. 25%

D. –20%

AACSB: Analytic
Blooms: Application
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.2 Fisher's Separation Theorem: a simplified example

19. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Calculate the rate of return on Project Normal.

A. 14.3%

B. 120.0%

C. 13.6%

D. 150.0%

AACSB: Analytic

Blooms: Application

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.2 Fisher's Separation Theorem: a simplified example

20. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Calculate the rate of return on Project Mega.

A. 19.4%

B. 19.2%

C. 16.1%

D. 23.1%

AACSB: Analytic

Blooms: Application

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.2 Fisher's Separation Theorem: a simplified example

21. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. The optimal decision would be to accept:

A. Project Mini.

B. Project Mega.

C. Projects Mini and Normal.

D. Projects Normal and Mega.

AACSB: Analytic

Blooms: Application

Difficulty: Hard

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.2 Fisher's Separation Theorem: a simplified example

22. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Assume the company has four equal shareholders (A, B, C and D), and has chosen Project Mega for investment. Suppose Shareholder A wishes to consume $50 now. What is her required repayment in the later period?

A. $12.50

B. $56.00

C. $14.00

D. $42.00

AACSB: Analytic

Blooms: Application

Difficulty: Hard

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

23. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Also assume the company has four equal shareholders (A, B, C and D), and has chosen Project Mega for investment. What amounts will Shareholder A have to finance her consumption in the later period, after consuming $50 in the first period?

A. $151.75

B. $181.25

C. $193.75

D. $179.75

AACSB: Analytic

Blooms: Application

Difficulty: Hard

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

24. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. What is the NPV of Project Mini?

A. ($92.86)

B. ($3.57)

C. $396.43

D. $4.06

AACSB: Analytic

Blooms: Application

Difficulty: Hard

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.2 Fisher's Separation Theorem: a simplified example

25. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. What is the NPV of Project Normal?

A. $66.96

B. $75.00

C. $8.04

D. $258.04

AACSB: Analytic

Blooms: Application

Difficulty: Hard

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.2 Fisher's Separation Theorem: a simplified example

26. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period, and that the company has four equal shareholders (A, B, C and D). Also assume the company has chosen Projects Normal and Mega for investment. Suppose Shareholder B wishes to consume $165 now. What is his required repayment in the later period?

A. $65

B. $165

C. $72.80

D. $184.80

AACSB: Analytic

Blooms: Application

Difficulty: Hard

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

27. Consider the following investment/dividend opportunities facing a company:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
Mini	450	400	500
Normal	550	250	625
Mega	650	150	775

Assume that the interest rate in the capital market is 12 per cent per period. Also assume that the company has four equal shareholders (A, B, C and D). Will the shareholders support the company's decision to invest in Projects Normal and Mega instead of just Project Mega?

A. No, only Shareholder B will support such a decision.

B. We cannot tell, as no information has been provided with regards to the consumption choices of Shareholders C and D.

C. Both Shareholders A and B will support this decision but we need to know the consumption choices of Shareholders C and D before being able to identify their preferences.

D. All the shareholders will support the company's decision.

AACSB: Analytic

Blooms: Application

Difficulty: Medium

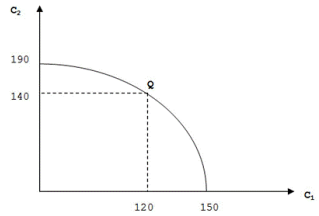
EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

28. Consider the following production possibilities curve:



Point Q represents:

A. an intermediate case in which a dividend of 30 units is paid at Time 1.

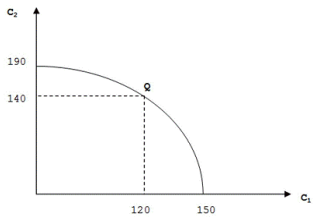
B. an intermediate case in which 30 units is invested at Time 1.

C. an intermediate case in which a dividend of 50 units is paid at Time 2.

D. none of the given options.

AACSB: Analytic
Blooms: Application
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-03 Identify a company's optimal investment/dividend policy under conditions of certainty
Section: 2.3 Fisher's Separation Theorem: a formal approach

29. Consider the following graph.



Which of the following statements is false?

A. The Company has 150 units of resources available to it.

B. The point (150,0) represents a dividend payment of zero units at Time 1.

C. 190 units would be available for consumption at Time 2 if no dividend were paid at Time 1.

D. None of the given options is false.

AACSB: Analytic

Blooms: Analysis

Difficulty: Medium

EQUIS: Analyse

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

30. Indifference curves are normally:

A. convex, which means they approach the horizontal axis as the level of C_2 increases.

B. concave, which means they approach the vertical axis as the level of C_2 increases.

C. convex, which means they approach the horizontal axis as the level of C_1 increases.

D. concave, which means they approach the vertical axis as the level of C_1 increases.

AACSB: Analytic

Blooms: Application

Difficulty: Easy

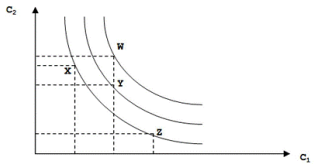
EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

31. Consider the following set of indifference curves:



Investment Y is:

A. preferred to Investments X and Z and is as desirable as Investment W.

B. preferred to Investment W, but is inferior to Investments X and Z.

C. preferred to Investments X and Z, but is inferior to Investment W.

D. preferred to Investments X and Z, which provide an investor with equal utility, and is preferred to Investment W.

AACSB: Analytic

Blooms: Application

Difficulty: Easy

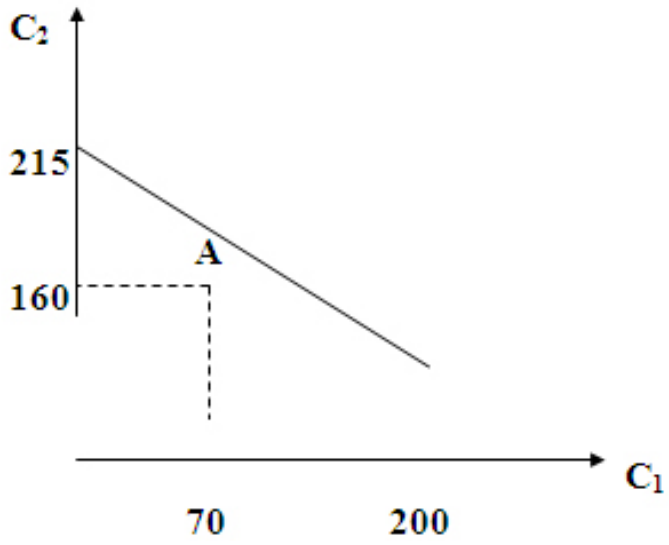
EQUIS: Analyse

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

32. Consider the following graph:



What is the interest rate per period?

A. 7.31%

B. 7.14%

C. 7.50%

D. 25.00%

AACSB: Analytic

Blooms: Application

Difficulty: Medium

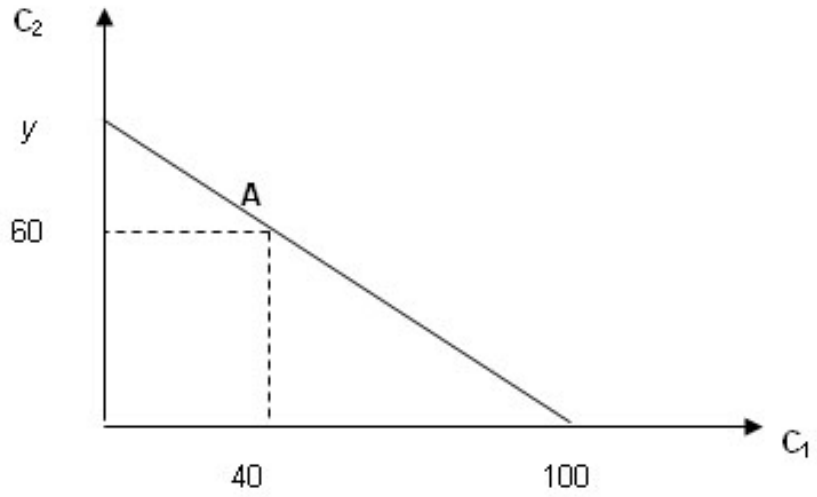
EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

33. Consider the following graph:



Assume that the interest rate per period is 15 per cent. Calculate *y*.

A. 115 units

B. 106 units

C. 92.17 units

D. 100 units

AACSB: Analytic

Blooms: Application

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

34. Which of the following correctly represents the equation of a market opportunity line?

A. $C_1 = [W_1(1 + i) + C_2]/(1 + i)$

B. $C_1(1 + i) = W_1(1 + i) + C_2$

C. $W_1(1 + i) – C_2 = C_1(1 + i)$

D. $C_2 = –W_1(1 + i) + C_1(1 + i)$

AACSB: Analytic

Blooms: Knowledge

Difficulty: Easy

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

35. The slope of a market opportunity line is given by:

A. $–(1 + i)$

B. $C_1 /(1 + i)$

C. $C_2 + C_1(1 + i)$

D. $–C_1 /(1 + i)$

AACSB: Analytic

Blooms: Knowledge

Difficulty: Easy

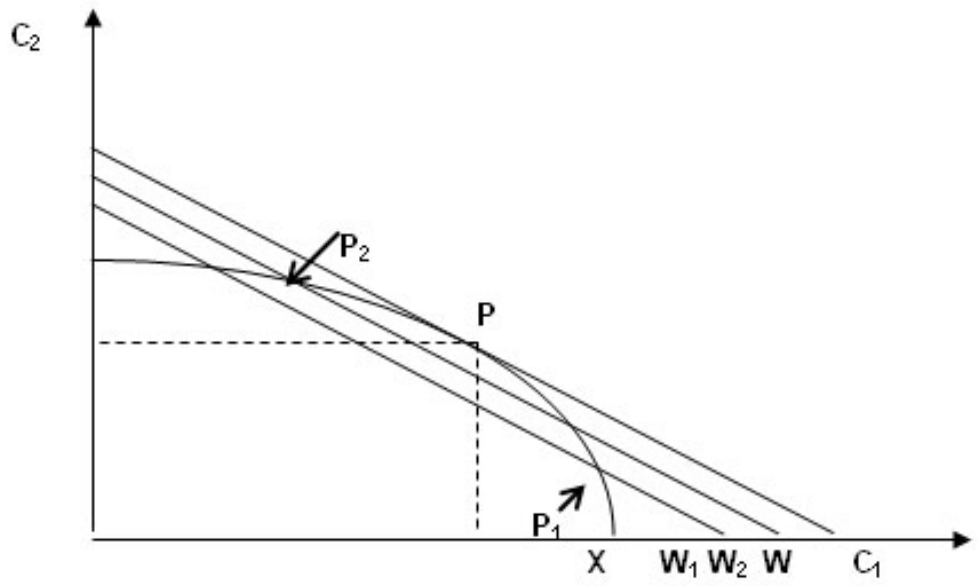
EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

36. Suppose that a company has X units of resources and is considering three investment/dividend policies, P_1, P_2 and P. The following graph shows market opportunity lines drawn through each of these points:



The line through P_1 shows that:

A. if policy P_1 were adopted, the shareholders' wealth would decrease from W to W_1.

B. if policy P_1 were adopted, the shareholders' wealth would increase from X to W_1.

C. if policy P_1 were adopted, the shareholders' wealth would remain unchanged at W_1.

D. none of the given options.

AACSB: Analytic

Blooms: Application

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

37. Which statement is false with respect to the decision rule: accept a project if and only if [Return at Time 2 / (1 + i) - Δ] > 0?

A. The decision rule is completely consistent with Fisher's separation theorem.

B. The decision rule is the same as the net present value rule.

C. A company that always applies the decision rule to its investment decisions will be able to locate the optimal investment/dividend policy and will maximise the wealth of its shareholders.

D. None of the given options.

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

38. Fama (1970) outlines the sufficient conditions in order for all shareholders to agree about the exact nature of uncertainty. Which of the following statements is not one of the specified sufficient conditions?

A. There are no transaction costs in trading securities.

B. All agree on the implication of current information for the future price and distributions of future prices of each security.

C. All information is costlessly available to all market participants.

D. None of the given options.

AACSB: Analytic
Blooms: Knowledge
Difficulty: Easy
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.4 Investors' reaction to managers' decisions

39. Fisher's separation theorem means that:

A. a company can make an investment decision even if all shareholders do not agree.
B. a company should invest beyond the point where the net present value of the marginal unit of investment is zero.
C. a company should invest up to a point where the rate of return on the marginal unit of investment equals the market interest rate.
D. none of the given options is correct.

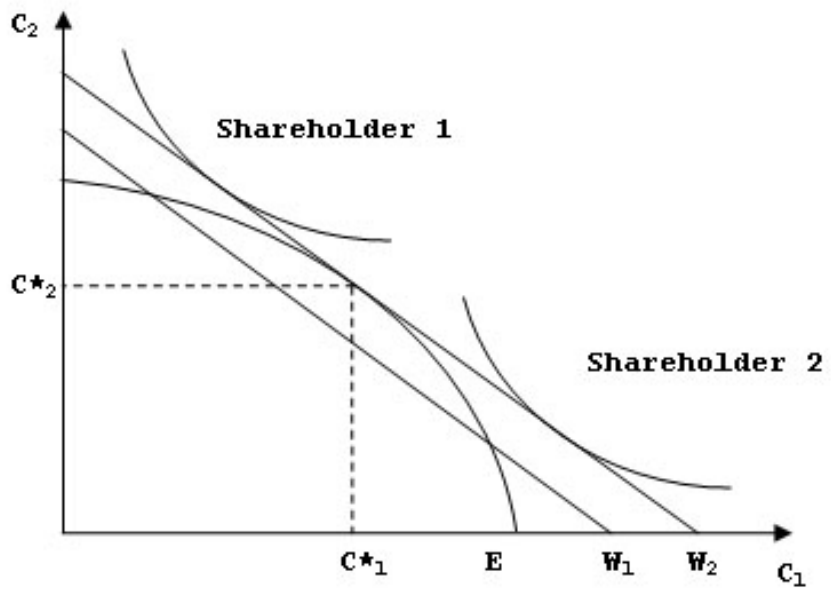
AACSB: Analytic
Blooms: Knowledge
Difficulty: Easy
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.2 Fisher's Separation Theorem: a simplified example

40. Which of the following statements is false?

A. If there is only one market interest rate, then the value of the company and the wealth of its shareholders are independent of the company's capital structure.
B. If any one point on a market opportunity line is attainable, then all other points on the line are also attainable by borrowing or lending.
C. The dividend decision does not affect shareholders' wealth, provided that the company does not alter its investment decision.
D. None of the given options.

AACSB: Analytic
Blooms: Knowledge
Difficulty: Easy
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.1 Introduction

41. Consider the following diagram:



In this diagram, if the optimal policy is chosen, the company invests the amount:

A. W_1–E

B. W_1–C^*_1

C. E–C^*_1

D. W_2–E

AACSB: Analytic

Blooms: Application

Difficulty: Medium

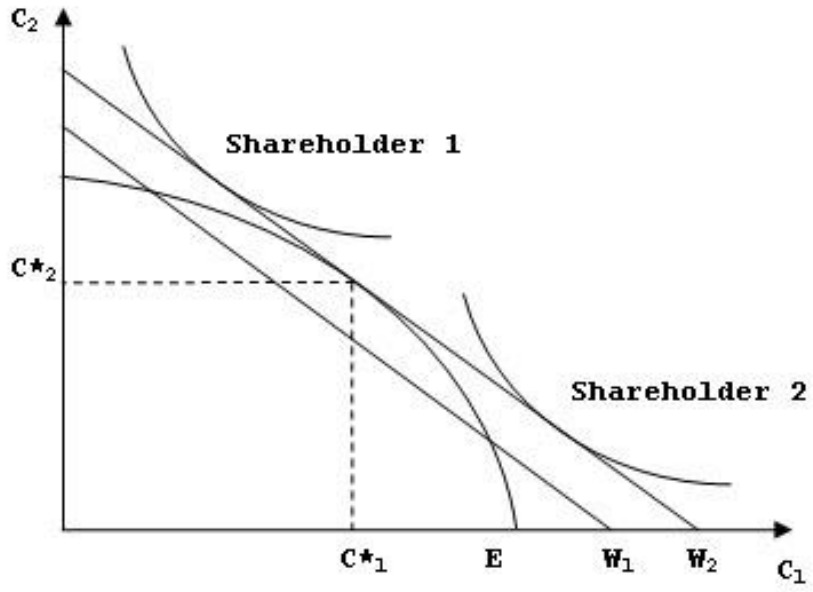
EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

42. Consider the following diagram:



In the diagram, if the optimal policy is chosen then shareholder 2, with the lower indifference curve, will optimise her consumption by:

A. lending in the second period and borrowing in the first period.

B. borrowing in the first period and repaying in the second period.

C. lending in the first period and recieving in the second period.

D. borrowing in the first period and recieving in the second period.

AACSB: Analytic

Blooms: Application

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

43. In the absence of _____ companies are unable to make decisions about dividend policy that will please all share holders.

capital markets

AACSB: Analytic
Blooms: Knowledge
Difficulty: Easy
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders
Section: 2.2 Fisher's Separation Theorem: a simplified example

44. A company can make optimal decisions to the benefit of all shareholders if they use the _____ rule to analyse investment proposals.

net present value

AACSB: Analytic
Blooms: Knowledge
Difficulty: Easy
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.2 Fisher's Separation Theorem: a simplified example

45. An _____ is a curve that shows a set of combinations such that an individual derives equal utility from any combination in the set.

indifference curve

AACSB: Analytic
Blooms: Knowledge
Difficulty: Easy
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

46. Share prices change as a result of investors' reaction to _____ provided through investment, financing and dividend decisions made by the managers of a company.

information

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.4 Investors' reaction to managers' decisions

47. According to Fisher's Theorem, provided that the company does not alter its investment decision, the dividend decision does not affect _____.

shareholders wealth

Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.4 Investors' reaction to managers' decisions

48. Fisher's separation theorem assumes markets have imperfections.

FALSE

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

49. Fisher's separation theorem has no implications for the investment decision.

FALSE

AACSB: Analytic
Blooms: Knowledge
Difficulty: Easy
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

50. If a project costs $700 and is expected to return $790 to shareholders in one years time, then the rate of return on the investment is 12.86%.

TRUE

AACSB: Analytic
Blooms: Knowledge
Difficulty: Hard
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-03 Identify a company's optimal investment/dividend policy under conditions of certainty
Section: 2.2 Fisher's Separation Theorem: a simplified example

51. The shape of the production possibilities curve determines the combinations of current dividend, investment and future dividend that a company can achieve.

TRUE

AACSB: Analytic
Blooms: Knowledge
Difficulty: Hard
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-01 Explain how a company's managers can, in principle, make financial decisions that will be supported by all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

52. In practice, managers are unable to predict with certainty the impact that a particular decision will have on a company's share price.

TRUE

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-03 Identify a company's optimal investment/dividend policy under conditions of certainty
Section: 2.4 Investors' reaction to managers' decisions

53. An indifference curve represents a set of possible consumption outcomes, which yields equal utility to the individual.

TRUE

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
Graduate Attributes: Problem-solving
Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

54. The market opportunity line indicates the preferences of individuals for a given level of wealth.

FALSE

AACSB: Analytic
Blooms: Knowledge
Difficulty: Medium
EQUIS: Apply knowledge
Graduate Attributes: Problem-solving
Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders
Section: 2.3 Fisher's Separation Theorem: a formal approach

55. Define the following terms:

(a) The production possibilities curve

(b) An indifference curve

(c) The market opportunity line

AACSB: Analytic

Blooms: Knowledge

Difficulty: Easy

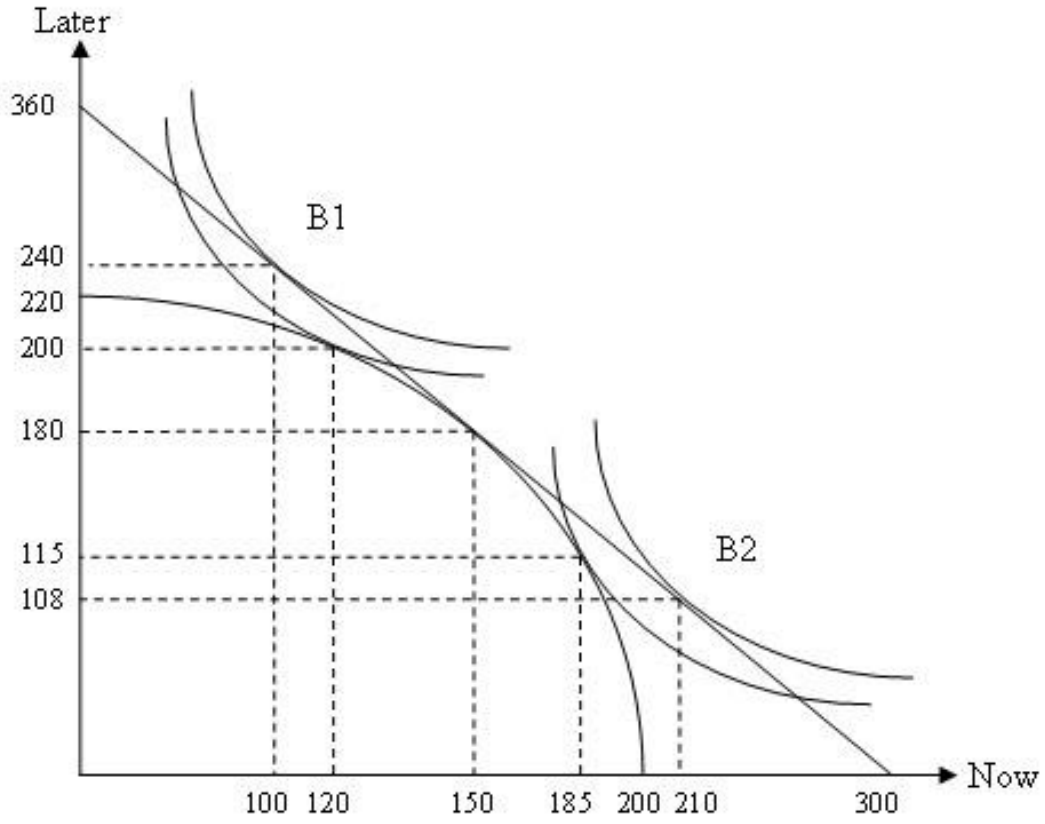
EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

56. B1 and B2 are equal shareholders in the company Banana Inc. They have each invested $200 in the company. The following graph shows on a per shareholder basis the production possibilities curve, B1 and B2's indifference curves and the market opportunity line.



(a) What is the interest rate?

(b) How much is invested by the company at the optimal point?

(c) Assuming that the company invests at the optimal point, complete the following table (where applicable) for shareholder B1.

	Now	Later
Dividend	150	
Borrow/Repay		
Lend/Recieve		
Consumption		

(d) Assuming that the company invests at the optimal point, complete the following table (where applicable) for B2.

	Now	Later
Dividend	150	
Borrow/Repay		
Lend/Recieve		
Consumption		

AACSB: Analytic

Blooms: Application

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-02 Explain how the existence of a capital market makes it possible for the company to make decisions acceptable to all shareholders

Section: 2.3 Fisher's Separation Theorem: a formal approach

57. The AlhpaBeta company is considering considering several investment opportunities. The interest rate for both borrowing and lending is 15 per cent per period and the investment/dividend opportunities are given in the following table:

Project	Investment Outlay Now ($)	Dividend Now ($)	Dividend Later ($)
AOne	1250	750	1350
BTwo	1500	500	1650
CThree	2000	0	2500

(a) What is the net present value of each project?

(b) Based on the NPV rule which project(s) should the company invest in?

(c) What is the IRR of project AOne?

(d) The company has 2 equal shareholders, Alpha and Beta, and invests in the project CThree. Alpha would prefer to consume $500 today. What can she do? How much will she be able to consume later?

AACSB: Analytic

Blooms: Application

Difficulty: Medium

EQUIS: Apply knowledge

Graduate Attributes: Problem-solving

Learning Objective: 02-03 Identify a company's optimal investment/dividend policy under conditions of certainty

Section: 2.2 Fisher's Separation Theorem: a simplified example

Chapter 02 Testbank Summary

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Blooms: Application	21
Blooms: Knowledge	35
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Difficulty: Hard	9
Difficulty: Medium	30
EQUIS: Analyse	3
EQUIS: Apply knowledge	52
Graduate Attributes: Problem-solving	57
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