

## Question #1 of 66

Question ID: 462662

Steve Cooley, the Chief Financial Officer for Canberra Corporation, decides that he wants to use as much debt as possible in his firm's capital structure. Cooley knows that to use more debt, he will need to make a persuasive argument to his board. Which of the following arguments used by Cooley to help with his goal of raising large amounts of additional debt is *least* supported by empirical evidence?

- ☐ A) The cost of debt is always cheaper than the cost of equity.
- ☐ B) Raising additional debt provides a signal to our shareholders that our firm's future prospects are positive.
- ☒ C) Increasing the amount of debt has an insignificant impact on our credit risk premium.

### Explanation

Although it is not the only factor, increasing the amount of debt will put downward pressure on the company's credit rating, resulting in an increase in the credit risk premium. This will in turn increase the costs of both debt and equity capital. Note that raising additional debt does provide a positive signal about future prospects. Also, saying that the cost of debt is always cheaper than the cost of equity is an accurate statement, but the static trade-off theory shows how balancing debt and equity capital can lead to lower costs for both components.

## Question #2 of 66

Question ID: 462604

Rupert Jones, a manager with Oswald Technologies, is confused about agency costs of equity and how they can be managed at his firm. To try to gain a better understanding about agency costs, Jones asks Karrie Converse, a well known consultant for an explanation. In their conversation, Converse makes the following statements:

Statement 1: Costs related to the conflict of interest between managers and owners of a business can be eliminated through a combination of bonding provisions and adequate monitoring through a quality corporate governance structure.

Statement 2: The less a company depends on debt in its capital structure, the lower the agency costs the company will tend to have.

Are Converse's statements concerning the agency costs of equity correct?

- ☐ A) Both are correct.
- ☒ B) Both are incorrect.
- ☐ C) Only one is correct.

### Explanation

Both of Converse's statements are incorrect. With regard to elimination of agency costs, residual losses may occur even with adequate monitoring and bonding provisions, because such provisions do not provide a perfect guarantee against losses. Also, if you read the statement carefully, it is contradictory because the costs associated with bonding insurance and monitoring are actual agency costs! The second statement is also incorrect because, according to agency theory, the use of debt forces managers to have discipline with regard to how they spend cash. This discipline causes greater amounts of

leverage to correspond to a reduction in agency costs.

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### Question #3 of 66

Question ID: 462618

Modigliani and Miller demonstrated that if corporate taxes and bankruptcy costs are introduced into an otherwise perfect world the weighted average cost of capital (WACC) will:

- ✓ **A) fall, then bottom out, and finally start to rise.**
- x B) fall continuously as more debt is added to the capital structure.
- x C) rise, then plateau, and finally start to fall.

#### Explanation

The WACC first falls because bondholders take less risk and, consequently, have a lower required rate of return. In addition, interest expenses are tax deductible. However, as the amount of debt rises, financial risk rises, and the chance for bankruptcy increases. If there are positive bankruptcy costs, both bondholders and stockholders will require increasingly higher rates of return as financial risk increases causing the WACC to rise. This rise offsets the benefits of using the cheaper source of financing.

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### Question #4 of 66

Question ID: 462656

The firm's target capital structure is *consistent* with which of the following?

- ✓ **A) Minimum weighted average cost of capital (WACC).**
- x B) Maximum earnings per share (EPS).
- x C) Minimum risk.

#### Explanation

At the optimal capital structure the firm will minimize the WACC, maximize the share price of the stock and maximize the value of the firm.

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### Question #5 of 66

Question ID: 462602

Katherine Epler, a self-employed corporate finance consultant, is working with her newest client, Harbor Machinery. Epler is discussing various capital structure theories with her client, and makes the following comments.

Comment 1: If we remove the assumption of no taxes from Modigliani and Miller's theory regarding capital structure, and if the firm holds some proportion of debt, increases in the corporate tax rate will increase the value of the firm.

Comment 2: If we also include the costs of financial distress in Modigliani and Miller's assumptions, the optimal capital structure will not contain any debt financing.

With respect to Epler's comments:

- ✓ **A) only one is correct.**

☐ **B) both are incorrect.**

☐ **C) both are correct.**

#### Explanation

Epler's first comment is correct. The tax deductibility of interest payments provides a tax shield that adds value to the firm. The value of a tax shield is equal to the marginal tax rate times the amount of debt in the capital structure, so the higher the tax rate, the greater the value of the tax shield and the value of the firm, all else equal. Epler's second comment is incorrect. If the costs of financial distress are also included in MM's assumptions, we get the static-tradeoff theory, where the firm will have debt in its capital structure up to the point where the marginal cost of financial distress exceeds the marginal value provided by the tax shield.

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### Question #6 of 66

Question ID: 462611

Which of the following *best* describes the shape of the line depicting the value of a levered firm when plotted according to the static trade-off theory? Assume that the percentage of debt in the capital structure is the independent variable.

☐ **A) U shaped.**

☒ **B) Upside down U shaped.**

☐ **C) Always upward sloping.**

#### Explanation

The line depicting the value of a levered firm according to the static trade-off theory looks like an upside down U. The value of the firm will initially increase due to the tax savings provided by taking on additional debt financing, and then will decline as the costs of financial distress exceed the tax benefits of taking on additional debt financing.

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### Question #7 of 66

Question ID: 462617

Joseph Palmer is discussing the impact of the tax shield provided by debt with his supervisor, Ming Chou. During the course of their discussion, Palmer makes the following statements:

Statement 1: The value of the tax shield provided by debt can be calculated by multiplying the pre-tax cost of debt by  $(1 - \text{tax rate})$ .

Statement 2: If a company is profitable, the value of its tax shield will be positive and its value will increase as its leverage increases, all else equal.

With respect to Palmer's statements:

☐ **A) both are incorrect.**

☐ **B) both are correct.**

☒ **C) only one is correct.**

#### Explanation

Palmer's first statement is incorrect. The calculation Palmer describes is the calculation for the after-tax cost of debt. The value of a tax shield is equal to the marginal tax rate times the amount of debt in the capital structure. Palmer's second statement is

correct. The tax shield adds value to the firm so that the value of a levered firm is greater than the value of an unlevered firm, all else equal.

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### Question #8 of 66

Question ID: 462653

Jayco, Inc. currently has a Debt/Assets ratio of 33.33% but feels its optimal Debt/Assets ratio should be 16.67%. Sales are currently \$750,000, and the total assets turnover (Sales / Assets) is 7.5. If Jayco needs to raise \$100,000 to expand, how should the expansion be financed so as to produce the desired debt ratio? Finance it with:

- ☒ **A) all equity.**
- ☐ **B) 25% debt, 75% equity.**
- ☐ **C) all debt.**

#### Explanation

Sales / Assets = 7.5 = 750,000 / Assets, so Assets = 100,000. Debt / 100,000 = 33.33%. Therefore, Debt must be 33,333. You want to change Debt/Assets to 16.67%, so you must double Assets (without increasing Debt) by adding 100,000 to equity.

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### Question #9 of 66

Question ID: 462606

According to pecking order theory, which of the following lists *most* accurately orders financing preferences from most to least preferred?

- ☒ **A) Retained earnings, debt financing, and raising external equity.**
- ☐ **B) Debt financing, retained earnings, and raising external equity.**
- ☐ **C) Retained earnings, raising external equity, and debt financing.**

#### Explanation

Financing choices under pecking order theory follow a hierarchy based on visibility to investors with internally generated capital being the most preferred, debt being the next best choice, and external equity being the least preferred financing option.

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### Question #10 of 66

Question ID: 462670

Financial leverage ratios tend to be low in countries that have:

- ☐ **A) inefficient legal systems.**
- ☒ **B) a large institutional investor presence.**
- ☐ **C) a high reliance on the banking system for raising debt capital.**

#### Explanation

Firms operating in countries with an active, large institutional investor presence tend to have less financial leverage. Large institutional investors tend to have greater resources to analyze companies and reduce information asymmetries, which reduces the use of debt. By contrast, companies with weak legal systems and a high reliance on the banking system will all

tend to have higher debt ratios.

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### Question #11 of 66

Question ID: 462615

Schwarzwald Industries recently issued new equity to help fund a new capital project. What type of signal is Schwarzwald's choice of financing sending to investors about the future prospects of the firm under the information asymmetry signaling theory and pecking order theory respectively?

- ✓ **A) Negative signal under both theories.**
- ✗ **B) Positive signal under only one theory.**
- ✗ **C) Positive signal under both theories.**

#### Explanation

Signaling theory results from asymmetric information, which refers to the fact that managers have more information about a company's future prospects than the firm's owners and creditors. Since managers are reluctant to sell new stock if they think the stock is undervalued, but very willing to sell stock if they think the stock is overvalued, selling stock sends a negative signal about a firm's future prospects. Pecking order theory, which is related to signaling theory, suggests that managers choose methods of financing based on the visibility of signals they send. Raising equity is the least preferred method of financing under pecking order theory, and it sends a negative signal.

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### Question #12 of 66

Question ID: 462671

The maturity structure for corporate debt is typically shorter in countries that have:

- ✗ **A) lower rates of inflation.**
- ✗ **B) more liquid stock and bond markets.**
- ✓ **C) low rates of GDP growth.**

#### Explanation

Firms operating in countries with higher GDP growth tend to use longer maturity debt, so firms with weaker economic growth will tend to use shorter maturity debt, all else equal. Note that low inflation means that longer maturity debt will do a better job holding its value, and that countries with highly liquid stock and bond markets will tend to use long maturity debt.

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### Question #13 of 66

Question ID: 462619

Which of the following statements about capital structure theories is *most* accurate?

- ✗ **A) In a Modigliani and Miller (MM) world with taxes, but no bankruptcy cost, you would expect to see firms taking on very little debt.**
- ✗ **B) Based on signaling theory, if a firm issues new common stock it means that the firm thinks future investment prospects are better than normal.**
- ✓ **C) In a world with taxes and bankruptcy costs one would expect there to be an optimal capital structure where the cost of capital is minimized and share price is maximized.**

### Explanation

It is true that in a world with taxes and bankruptcy costs there will be an optimal capital structure where the cost of capital is minimized and share price is maximized. The other statements are false. In a tax world without bankruptcy the optimal capital structure is 100% debt. When firms issue new equity, it may suggest investment prospects look poor.

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### Question #14 of 66

Question ID: 462608

John Harrison is discussing the implications for Modigliani and Miller (MM's) propositions (assuming no corporate or personal taxes) for manager's decisions regarding capital structure with his supervisor, Harriet Perry. In the conversation, Harrison makes the following statements:

Statement 1: According to MM's propositions, increasing the use of cheaper debt financing will increase the cost of equity and the net change to the company's weighted average cost of capital (WACC) will be zero.

Statement 2: Since MM's propositions assume that there are no taxes, equity is the preferred method of financing.

What is the *most* appropriate response to Harrison's statements?

☒ A) Agree with neither.

☒ B) Agree with both.

☒ C) Agree with one only.

### Explanation

Perry should agree with the first statement. MM asserts that the use of debt financing, although it is cheaper than equity, will increase in the cost of equity, resulting in a zero net change in the WACC. Perry should disagree with the second statement. Although MM's propositions assume that there are no taxes, the conclusion is that the mix of debt and equity financing is irrelevant and that there is no preferred method of financing.

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### Question #15 of 66

Question ID: 462672

Katherine Epler, a self-employed corporate finance consultant, is conducting a seminar concerning differences in financial leverage across different countries. In her seminar, Epler makes the following statements:

Statement 1: Companies in developed countries tend to use less long-term debt when financing their operations compared with companies in emerging markets.

Statement 2: Companies operating in Japan tend to have a greater reliance on shorter term debt financing than companies operating in the United States.

With respect to Epler's statements:

☒ A) both are incorrect.

☒ B) both are correct.

☒ C) only one is correct.

### Explanation

Epler's first statement is incorrect. Companies in developed countries tend to use more long-term debt than emerging market countries. This makes sense because countries with more liquid capital markets (which would favor developed markets) tend to use more long-term debt. Epler's second statement is correct. Japan relies on more short-term debt than the United States, which makes sense as the legal system and institutional investor presence tends to be greater in the U.S., which favors longer maturity debt.

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### Question #16 of 66

Question ID: 462668

Michael Sherman is a finance professor at the University of Tuskaloosa. In a recent lecture concerning the factors an analyst should consider when evaluating the impact of capital structure on the valuation of a firm, Sherman makes the following statements:

Statement 1: The changes that occur in a company's capital structure over time are irrelevant for assessing the impact of capital structure on valuation because changes in market conditions mean that only the current capital structure is relevant for analysis.

Statement 2: If an analyst is comparing the capital structure of one firm to the capital structure of a competitor firm, it is important to adjust the analysis for differences in business risk.

Sherman's students should agree with:

- ☒ A) both statements.
- ☒ B) only one statement.
- ☒ C) neither statements.

#### Explanation

Sherman's students should disagree with his first statement. Changes in capital structure for a firm over time is essential for evaluating whether or not management's decisions have worked to improve the firm's value. Sherman's second statement is correct. Differences in capital structure could reflect differences in business risk, so the analyst should try to make comparisons based on similar business risk characteristics in order to have a true apples to apples comparison.

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### Question #17 of 66

Question ID: 462663

Which of the following changes in debt ratings is *most likely* to have the greatest negative impact on a firm's weighted average cost of capital (WACC)? A change in debt rating from:

- ☒ A) BBB to BB.
- ☒ B) AA to A.
- ☒ C) BB to BBB.

#### Explanation

Since the cost of capital is tied to debt ratings, many managers have goals for maintaining certain minimum debt ratings when determining their capital structure policies. Lower debt ratings mean higher level of credit risk, and a higher cost of capital. Managers want to avoid drops in bond ratings in any case, but a bond rating drop from investment grade to speculative grade (BBB to BB) tends to cause a significant increase in the cost of debt and the WACC.

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### Question #18 of 66

Question ID: 462666

Vernon Hurd is an analyst that is covering Oswald Technologies. Hurd does not have the privilege of knowing the firm's exact target capital structure, but would like to determine whether or not the capital structure policies followed by Oswald's management is maximizing the value of the firm. Which of the following approaches would be most useful to Hurd to determine whether management's current capital structure policy is maximizing Oswald's value?

- ☐ A) Cross-sectional ratio analysis with firms that have similar business risk to Oswald.
- ☐ B) Dupont analysis.
- ☒ C) Scenario analysis.

#### Explanation

The topic review specifically mentions using scenario analysis to assess how changes in a firm's debt ratio may impact the firm's WACC and then evaluate what happens to a firm's value if the company moves toward its optimal capital structure.

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### Question #19 of 66

Question ID: 462616

Davis Streng, the corporate controller for the Cannizaro Corporation has been researching Modigliani and Miller's (MM) theories on capital structure. Streng would like to apply the theories to his firm's capital structure, but does not agree with MM's assumption of no taxes, since Cannizaro has a 40% tax rate. If Streng removes the assumption of no taxes, but keeps all of MM's other assumptions, which of the following would be the optimal capital structure for maximizing the value of the firm?

- ☐ A) The capital structure Streng chooses is irrelevant.
- ☒ B) 100% debt.
- ☐ C) 100% equity.

#### Explanation

If MM's other assumptions are maintained, removing the no tax assumption means that the value of the firm is maximized when the value of the tax shield is maximized, which occurs with a capital structure of 100% debt.

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### Question #20 of 66

Question ID: 462652

Which of the following is *least likely* to be a reason why a firm's actual capital structure may vary from the target capital structure?

- ☒ A) The firm decides to finance a low risk project with 100% debt to improve the project's profitability.
- ☐ B) The firm decides to issue additional equity because management believes the firm's stock is overpriced.
- ☐ C) The firm decides to issue additional debt due to a temporary discount in underwriting fees for corporate debt.

#### Explanation



A firm should always finance a project based on the firm's weighted average cost of capital, although when evaluating a project, the firm may apply a risk factor to adjust the risk of the project. A corporate manager generally cannot deem some projects as being financed by debt and some by equity as all projects are effectively financed proportionately based on the firm's capital structure. In practice, a firm's actual capital structure will float around its target. For a firm that does have a target capital structure, the actual structure may vary from the target due to market value fluctuations, or management's desire to exploit an opportunity in a particular financing source.

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### Question #21 of 66

Question ID: 462665

Jeffery Pyle, a health care analyst for a major brokerage firm, is trying to determine how capital structure policy impacts the valuation of firms he covers. Which of the following factors is likely to be the *least* useful for his analysis?

- ☒ **A) How often management uses internally generated capital versus raising new capital in the capital markets.**
- ☐ **B) Quality of corporate governance.**
- ☐ **C) Differences in capital structure across firms in his coverage universe.**

#### Explanation

The three main factors that a financial analyst must consider when evaluating how a firm's capital structure impacts valuation are changes in the firm's capital structure over time, differences in capital structure between competitors with similar business risk, and company specific factors such as quality of corporate governance that may impact agency costs.

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### Question #22 of 66

Question ID: 462622

Bhairavi Patel, an analyst for major brokerage firm, is considering how to incorporate the static trade-off capital structure theory into her valuation models for companies she covers. Patel is discussing the static trade-off theory with her colleagues, and makes the following statements:

Statement 1: If a firm maintains a high debt rating, the firm cannot be at its optimal capital structure based on the static trade-off theory.

Statement 2: The static theory implies that differences in the optimal capital structure across similar firms in different countries must be the result of different tax rates in those countries.

With respect to Patel's statements:

- ☒ **A) both are incorrect.**
- ☐ **B) both are correct.**
- ☐ **C) only one is correct.**

#### Explanation

Neither of Patel's statements is correct. Firms seek to maintain a high debt rating because it implies a lower probability of financial distress, which reduces the cost of debt and equity capital and leads to a higher value for the firm. Although a firm would not be at its optimal capital structure if it were not using enough debt, a firm can certainly have a large proportion of high quality debt that keeps the firm at its optimal capital structure while maintaining a high credit rating. The second statement is

also incorrect. Although differences in tax rates can play a role in having different optimal capital structures for similar firms, differences in costs of financial distress will play a role as well. Differences in legal structure, liquidity, and other factors will result in different perceived costs of financial distress in different countries, which will in turn, contribute to different optimal capital structures according to the static trade-off theory.

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### Question #23 of 66

Question ID: 462614

Which of the following is likely to encourage a firm to *increase* the amount of debt in its capital structure?

- ☐ A) The personal tax rate increases.
- ☒ B) The corporate tax rate increases.
- ☐ C) The firm's earnings become more volatile.

#### Explanation

An increase in the corporate tax rate will increase the tax benefit to the corporation, because interest expense is not taxable. An increase in the personal tax rate will not impact the firm's cost of capital. More volatile earnings increase the risk of the firm and therefore the firm would not desire to increase financial risk as a result of these changes.

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### Question #24 of 66

Question ID: 462660

Assume that the debt rating given by Standard and Poor's for Oswald Technologies drops from AAA to BBB. Which of the following reflects the *most likely* increase in the cost of debt for Oswald Technologies?

- ☐ A) 10 basis points.
- ☒ B) 100 basis points.
- ☐ C) 500 basis points.

#### Explanation

Historically, the average spread between AAA rated bonds and BBB rated bonds has been 100 basis points, so 100 basis points is the most likely answer. Note however that the actual spread may fluctuate due to market conditions, and may be wider in recessions.

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### Question #25 of 66

Question ID: 462603

Which of the following is *least likely* to be categorized as a cost of financial distress?

- ☐ A) Legal fees paid to bankruptcy lawyers.
- ☒ B) Premiums paid for bonding insurance to guarantee management performance.
- ☐ C) Having a potential merger partner pull out of a proposed deal.

#### Explanation

Premiums paid for bonding insurance to guarantee management performance is an example of an agency cost. Agency costs are costs associated with the fact that all public companies are not managed by owners and the conflict of interest created by

that fact. Costs of financial distress can be direct or indirect. Direct costs would include cash expenses associated with bankruptcy, such as legal and administrative fees, while indirect costs would include foregone business opportunities, inability to access capital markets, or loss of trust from customers, suppliers, or employees.

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## Questions #26-31 of 66

Frank Collins, CFA, is managing director for Brisbane Capital Resources, an Australian fund manager. The firm has had great success through the years with its growth-oriented investment strategy, but has suffered when the markets change in favor of value investment strategies. Consequently, Collins is exploring how the firm might increase its presence in the value sector of the market.

Many of the firms that reside in the value sector are those that have fallen on hard times, and have underperformed their peers. During his examination of firms meeting various value criteria, Collins has noted that while falling sales and the lack of profits are sometimes the obvious causes of the substandard performance, in other cases sales and profits do not appear to be the root cause. He wonders if the way that these firms have been capitalized is having a negative impact on their values.

Collins recalls from his days of studying finance at the University of Queensland, that a Nobel Prize was awarded for one of the theories in the capital structure area. His recollection of the details is sketchy, so he has contacted Dr. Martin Gray from UQ's Department of Commerce to discuss capital structure in theory and in practice.

Gray tells Collins that his memory is indeed correct, that a Nobel Prize was awarded to Miller and Modigliani for their work in explaining the capital structure decision. Interestingly, he notes that their theories say that, under the right circumstances, capital structure is irrelevant. Obviously, the key is whether or not the right circumstances are relevant to what is observed in the real world.

Gray continues to tell Collins that there are a variety of matters that complicate the MM theory in practice. Firms pay taxes, managers may be motivated by their own self-interests, and adjustments to a firm's capital structure are not costless. All of these factors affect the MM theories, and have given rise to other theories that attempt to explain why firms finance themselves as they do.

Collins also wonders if capital structure decisions are affected in any way by the country in which the firm is domiciled. He knows that Australia tends to follow the Anglo-American financial model, but that firms in continental Europe, Japan, and other countries are more accustomed to relying upon banks for capital. He wonders if this affects the capital structures observed across firms, even when the firms have the same underlying business risk.

Finally, Collins asks Gray about corporate debt ratings. Gray tells him that ratings fall broadly across two classes-investment grade and speculative-with a variety of ratings within each class. Moreover, Gray advises that firms usually seek to maintain a credit rating in the investment grade class, since some fiduciary investors are precluded from holding debt in the speculative class. Collins wonders if a firm's debt ratings have any bearing upon the choice of capital structure.

## Question #26 of 66

Question ID: 462639

Which of the following statements *most* accurately characterizes the static trade-off theory of capital structure?

- ☒ A) Increasing the use of relatively lower cost debt causes the required return on equity to increase such that the overall cost of capital is unchanged.
- ☒ B) Regardless of how the firm is financed, the overall value of the firm and aggregate value of the claims issued to finance it remain the same.
- ☒ C) Firms will seek to use debt financing up to the point that the value of the tax shield benefit is outweighed by the costs of financial distress.

### Explanation

The static trade-off theory of capital structure states that firms will seek to use debt financing up to the point that the value of the tax shield benefit is outweighed by the costs of financial distress. In other words, the capital structure is determined by the trade-off between these two factors. (Study Session 8, LOS 26.a)

### Question #27 of 66

Question ID: 462640

Which of the following statements *most* correctly characterizes the pecking order theory of capital structure?

- ☐ A) Regardless of how the firm is financed, the overall value of the firm and aggregate value of the claims issued to finance it remain the same.
- ☐ B) Firms will seek to use debt financing up to the point that the value of the tax shield benefit is outweighed by the costs of financial distress.
- ☒ C) Firms have a preference ordering for capital sources, preferring internally-generated equity first, new debt capital second, and externally-sourced equity as a last resort.

### Explanation

The pecking order theory of capital structure assumes that firms have a preference ordering for capital sources. They prefer to use internally-generated equity first. When the internally-generated equity is exhausted, they issue new debt capital. As a last resort they will rely on externally-sourced equity. The reason that new equity is the last resort is that the issuance of new stock is assumed to send a negative signal to investors regarding firm value. (Study Session 8, LOS 26.a)

### Question #28 of 66

Question ID: 462641

When taxes are incorporated into the capital structure decision, the main result is that:

- ☐ A) firms should increase the use of equity financing because of its inherent tax advantages.
- ☐ B) the costs of financial distress become relevant to the analysis.
- ☒ C) the firm derives a tax shield benefit from using debt because the interest expense is tax-deductible.

### Explanation

The main impact of incorporating corporate income taxes is that the firm derives a tax shield benefit because interest is a tax-deductible expense. (Study Session 8, LOS 26.a)

### Question #29 of 66

Question ID: 462642

Which of the following reasons is *least* accurate regarding why a firm's actual capital structure may deviate from its target capital structure?

- ☒ A) The book values of outstanding debt and equity are different from their market values.
- ☐ B) Management may believe that now is an opportune time to issue equity.
- ☐ C) There may be economies of scale in issuing debt securities.

### Explanation

The book values of equity and debt are generally not relevant to assessing a firm's capital structure. It is the market values of equity and debt that determine the current capital structure. (Study Session 8, LOS 26.b)

### Question #30 of 66

Question ID: 462643

Which of the following statements *most* accurately characterizes how debt ratings may affect a firm's capital structure policy?

- ✓ **A) A firm may be deterred from increasing the use of debt to avoid having its credit rating reduced below some minimum acceptable level.**
- x **B) Firms that have their credit ratings reduced below investment grade are not able to issue additional debt.**
- x **C) Because credit ratings are based upon cash flow coverage of interest expense, they are not influenced by the firm's capital structure.**

#### Explanation

Credit ratings can be factored into management's capital structure policy if a firm has a minimum rating objective, and this is likely to be adversely affected by issuing additional debt. (Study Session 8, LOS 26.c)

### Question #31 of 66

Question ID: 462644

Which of the following statements concerning the use of leverage is *most* accurate?

- ✓ **A) Companies in countries where the use of bank debt (as opposed to issuing bonds) is more prevalent tend to use more leverage.**
- x **B) A high degree of information asymmetry tends to reduce the use of debt in the capital structure.**
- x **C) The use of leverage in capital structures is broadly consistent in most developed economies.**

#### Explanation

Companies in countries where the use of bank borrowing is relatively more prevalent than the issuance of corporate bonds tend to use more leverage. The other statements are incorrect, based upon observations across countries. (Study Session 8, LOS 26.e)

### Question #32 of 66

Question ID: 462621

Katherine Epler, a self-employed corporate finance consultant, is working with another new client, Thurber Electronics. Epler is discussing the static trade-off capital structure theory with her client, and makes the following comments:

Comment 1: Under the static trade-off theory, the graph of a company's weighted average cost of capital has a U shape.

Comment 2: According to the static trade-off theory, every firm will have the same optimal amount of debt that maximizes the value of the firm.

With respect to Epler's comments:

- x **A) both are correct.**
- ✓ **B) only one is correct.**

☐ C) both are incorrect.

#### Explanation

Epler's first comment is correct. When graphing a company's WACC according to the static trade-off theory, the WACC will initially decline as a company increases its tax savings through the use of debt. However, as more debt is added, the WACC will reach a point where it increases due to the increasing costs of financial distress. Note that when graphing the static trade-off theory, the WACC looks like a U shape, while the value of the firm looks like an upside down U shape. This makes sense because the value of the firm is maximized when the WACC is minimized. Epler's second comment is incorrect. Every firm will have a different optimal capital structure that will depend on the firm's operating risk, tax situation, industry influences, and other factors.

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### Question #33 of 66

Question ID: 462658

A firm's optimal debt ratio:

- ☐ A) maximizes return.
- ☐ B) minimizes risk.
- ☒ C) is the firm's target capital structure.

#### Explanation

The optimal debt ratio for a firm balances the influences of risk and return, leading to a maximization of share price. As such, the optimal debt ratio serves as a target level of debt financing for the value-maximizing firm. A debt ratio of 1.0 would be possible only if one hundred percent of the firm were financed with debt, eliminating equity ownership. Such a scenario is impossible.

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### Question #34 of 66

Question ID: 462610

According to the static trade-off theory:

- ☒ A) there is an optimal proportion of debt that will maximize the value of the firm.
- ☐ B) new debt financing is always preferable to new equity financing.
- ☐ C) the amount of debt used by a company should decrease as the company's corporate tax rate increases.

#### Explanation

The static trade-off theory seeks to balance the costs of financial distress with the tax shield benefits from using debt. Under the static trade-off theory, there is an optimal capital structure that has an optimal proportion of debt that will maximize the value of the firm.

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### Question #35 of 66

Question ID: 462605

Which of the following statements regarding how different capital structure theories impact managers' capital structure decisions is *most* accurate? According to:

- ✓ **A) pecking order theory, issuing new debt is preferable to issuing new equity.**
- x **B) the static trade-off theory, debt will not be used if a company is in a high corporate tax bracket.**
- x **C) MM's propositions (assuming no taxes), companies have an optimal level of debt financing.**

#### Explanation

Pecking order theory is related to the signals management sends to investors through its financing choices. Financing choices follow a hierarchy based on visibility to investors with internally generated funds being the least visible and most preferred, and issuing new equity as the most visible and least preferred. Under static trade-off theory, higher tax brackets result in greater tax savings from using debt financing. Under MM's propositions (assuming no taxes), capital structure is irrelevant and there is no optimal level of debt financing.

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### Question #36 of 66

Question ID: 462669

Katherine Epler, a self-employed corporate finance consultant, is having a discussion with friends that are also in the corporate finance field. After talking about their families, the discussion turns to factors that tend to impact capital structure. During the course of the conversation, Epler makes two statements.

Statement 1: Favorable tax rates on dividend income relative to interest income will reduce the value of the tax shield provided by debt in the static trade-off theory of capital structure.

Statement 2: Evidence indicates that reductions in the net agency costs of equity tend to lead to lower financial leverage ratios.

With respect to Epler's statements:

- x **A) only one is correct.**
- x **B) both are incorrect.**
- ✓ **C) both are correct.**

#### Explanation

Epler's first statement is correct. Miller (of Modigliani and Miller) concluded that if investors face different tax rates on dividend and interest income, the advantage for debt financing may be reduced somewhat. This conclusion is supported by international capital structure differences as countries with favorable dividend tax rates tend to use less debt in their capital structure. Epler's second comment is also correct. When looking at international differences in capital structure, countries that have factors in place such as stronger legal systems and a greater presence of analysts and auditors tend to reduce agency costs and therefore also have lower financial leverage ratios. Note that higher leverage ratios tend to reduce agency costs, but reducing agency costs does not lead to higher leverage ratios.

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### Question #37 of 66

Question ID: 462620

Which of the following firms is *most likely* to utilize additional debt the next time it raises capital? The firm:

- x **A) firm that has experienced significant losses in recent years.**
- ✓ **B) in a high tax bracket.**

☐ C) that has many new fixed assets.

#### Explanation

The value of tax deductibility rises with tax rates. Of course, there are other ways to reduce taxes. Firms with many new assets are probably also benefiting from high levels of depreciation. Firms with recent losses may be avoiding taxes by writing off those losses.

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### Question #38 of 66

Question ID: 462667

The optimal capital structure:

- ☐ A) minimizes the required rate on equity maximizes the stock price.
- ☒ B) maximizes the stock price minimizes the weighted average cost of capital.
- ☐ C) maximizes expected EPS maximizes the price per share of common stock.

#### Explanation

At the optimal capital structure the firm will minimize the WACC, maximize the share price of the stock and maximize the value of the firm.

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### Question #39 of 66

Question ID: 462623

Which of the following statements about a firm's capital structure is *least* accurate?

- ☐ A) The optimal capital structure is the one that minimizes the weighted average cost of capital and consequently maximizes the value of the firm's share price.
- ☐ B) If bankruptcy costs were included into the M&M analysis of capital structure in a tax world there would be an optimal capital structure between no debt and all debt.
- ☒ C) The firm's share price is maximized when the firm maximizes its earnings per share while it minimizes its cost of capital.

#### Explanation

The optimal capital structure is the one that maximizes stock price and minimizes the WACC. The optimal capital structure is not the one that maximizes the firm's EPS.

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### Questions #40-45 of 66

Tad Bentley, CFA, is the chief financial officer (CFO) for Industrial Inc., a manufacturer and distributor of cleaning supplies designed for commercial applications. Industrial Inc.'s current target market spans the entire United States, and possesses a large percentage of the national market. Senior management has formulated a strategy for expansion into Europe and Asia in the near future. The success of the expansion plans lay in large part upon the firm's ability to raise additional capital in the marketplace to finance the expansion. According to the preliminary time schedule for expansion into Europe and Asia, funds would need to be made available to the firm within the next eighteen to twenty four months.



Bentley is in charge of the team that is evaluating all financing options available to Industrial Inc. to determine which method would minimize the firm's weighted average cost of capital (WACC) while providing a capital structure that will maximize firm value and that is attractive to outside investors. The firm is considering either issuing additional debt or issuing a secondary equity offering to finance the venture. The firm's target capital structure will be utilized to determine what the specific advantages and disadvantages associated with the different methods of raising capital.

Industrial currently has \$450 million of shareholders' equity outstanding. The company also has \$100 million of 10-year notes issued with 4 years remaining to maturity. Industrial Inc.'s current rating is Aa by Moody's and AA by Standard and Poor's (S&P). Bentley is aware that any financing strategy must be considered in light of the potential impact the decision could have upon the company's current rating.

Any new acquisition of capital will be carefully analyzed in relation to Industrial Inc.'s current capital structure as well. Bentley is familiar with the different theories of capital structure and intends to determine which one is most applicable to Industrial Inc.'s current situation. Industrial Inc. is publicly traded on the New York Stock Exchange, and several analysts at large brokerage firms provide research on the stock. Bentley wants to ensure that the company's approach to raising additional capital will be acceptable to analysts and investors alike.

Top management of Industrial, Bentley included, collectively own a 20% equity stake in the firm, through either direct purchase of the stock or the receipt of executive stock options. This group is placing pressure on Bentley to recommend a strategy that would not significantly dilute their ownership position. Bentley realizes that he must recommend a strategy that will most effectively utilize the company's assets and that will be in the best interest of all of the company's stakeholders.

### Question #40 of 66

Question ID: 462632

Under a strict set of assumptions, Modigliani and Miller (MM) proposed a capital structure theory in 1958 in which Proposition I proves that:

- ☒ **A) the cost of debt is lower than the cost of equity, so a firm should issue the maximum amount of debt before issuing equity.**
- ☒ **B) capital markets are perfectly competitive.**
- ☒ **C) the value of a firm is unaffected by its capital structure.**

#### Explanation

MM's underlying assumptions are that capital markets are perfectly competitive (no transaction costs) and that investors have homogenous expectations with respect to cash flows. Under these two "perfect world" assumptions, the value of a firm is unaffected by its capital structure because the value of a firm's assets will always be the same regardless of its debt to equity ratio. (Study Session 8, LOS 26.a)

### Question #41 of 66

Question ID: 462633

Under MM's Proposition II of their capital structure theory, will a firm that increases its use of debt *most* likely affect default risk, cost of equity, or both?

- ☒ **A) Does not affect either.**
- ☒ **B) Increases both.**
- ☒ **C) Increases only one.**

#### Explanation

The increased use of debt has no impact on expected default rates under MM, because it is assumed to be risk-free. The cost

of equity does increase because the firm's business risk is concentrated on a smaller proportion of equity as leverage increases. (Study Session 8, LOS 26.a)

### Question #42 of 66

Question ID: 462634

Bentley anticipates that whatever method of financing choice is utilized, it will be interpreted by investors as a signal of the firm's strategy and overall economic health. In accordance with the pecking order theory, which of the following methods are least likely and most likely to send "signals" to investors?

<u>Least Likely</u>	<u>Most Likely</u>
<input checked="" type="checkbox"/> A) External equity	Internally generated equity
<input checked="" type="checkbox"/> B) External equity	Debt
<input checked="" type="checkbox"/> C) Internally generated equity	External equity

#### Explanation

Internally generated equity is the method least visible to investors, while external equity is the most visible. (Study Session 8, LOS 26.a)

### Question #43 of 66

Question ID: 462635

Which of the following statements regarding the role of debt ratings is *least* accurate?

- ☒ A) Any rating Ba (from Moody's) or BB (from S&P) or higher is considered to be "investment grade".
- ☒ B) Historically, the difference in yield between an AAA-rated bond and a BBB-rated bond has averaged 100 basis points.
- ☒ C) The lower the debt rating, the higher the level of default risk for both shareholders and bondholders alike.

#### Explanation

Bonds must be rated at least Baa (Moody's) or BBB (S&P) to be considered investment grade. (Study Session 8, LOS 26.c)

### Question #44 of 66

Question ID: 462636

As a result of Industrial expanding its operations into Europe and Asia, Bentley anticipates an increase in foreign investors in the firm. Which of the following statements regarding international differences in leverage is *least* accurate?

- ☒ A) Companies in the U.S. tend to use shorter maturity debt than companies in Japan.
- ☒ B) Companies in Japan and France tend to have more debt in their capital structure than firms in the U.S.
- ☒ C) Companies operating in countries that have active institutional investors tend to have less financial leverage than firms in countries with less of an institutional presence.

### Explanation

Debt levels vary by country. For example, companies in the U.S. tend to use longer maturity debt than companies in Japan. More generally, companies in developed countries tend to use more debt with longer maturities than firms in emerging markets. (Study Session 8, LOS 26.e)

### Question #45 of 66

Question ID: 462637

In any firm, managers who do not have a stake in the company do not bear the costs of taking on too much or too little risk. The costs associated with the conflicts of interest between managers and owners are referred to as:

- ☐ A) monitoring costs.
- ☒ B) agency costs of equity.
- ☐ C) bonding costs.

### Explanation

Monitoring costs and bonding costs are components of the net agency cost of equity. (Study Session 8, LOS 26.a)

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### Question #46 of 66

Question ID: 462612

Which of the following companies is *most likely* to have the greatest expected cost of financial distress?

- ☐ A) An airline company with strong management.
- ☐ B) A steel manufacturer with an average debt to equity ratio for the industry.
- ☒ C) An information technology service provider with a weak corporate governance structure.

### Explanation

The expected cost financial distress is related to the combination of the cost and probability of financial distress. Firms who have a ready secondary market for their assets such as airlines or steel manufacturers, have lower costs from financial distress due to the marketability of their assets. Firms with fewer tangible assets, such as information technology service providers, have less to liquidate and therefore have higher costs related to financial distress. The probability of financial distress is positively related to the amount of leverage on the balance sheet, and negatively related to the quality of a firm's management and corporate governance structure.

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### Question #47 of 66

Question ID: 462613

Modigliani and Miller demonstrated that if corporate taxes are introduced into an otherwise perfect world, the optimal capital structure would be:

- ☐ A) an equal amount of debt and equity.
- ☐ B) all equity.
- ☒ C) all debt.

### Explanation

In this almost perfect world, the tax deductibility of interest payments encourages firms to use more debt in their capital structures. Since the more the firm borrows the greater the tax write-offs, the firm is encouraged to hold the maximum amount of debt possible. There could essentially be a single equity share, making up a very small portion of the financing, and the remainder, essentially 100%, would be financed with debt.

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### Question #48 of 66

Question ID: 462654

Katherine Epler, a self-employed corporate finance consultant, is conducting a seminar for executive management teams regarding issues related to a company's capital structure. In the morning session of the seminar, Epler makes the following two statements:

Statement 1: Management teams will have a target capital structure for their firm because of an awareness of how competing firms finance their operations and a desire to keep their financial ratios close to industry averages.

Statement 2: In order to reap the benefits that come with having a target capital structure, management must always raise capital in the exact proportions called for by the target.

With respect to Epler's statements:

- ☒ **A) both are incorrect.**
- ☐ **B) both are correct.**
- ☐ **C) only one is correct.**

#### Explanation

Both of Epler's statements are incorrect. Management teams will have a target capital structure because they are aware that their firm as an optimal capital structure that will maximize the value of the firm. It is the desire to keep the capital structure close to the optimal structure that leads to a target capital structure, not a desire to keep financial ratios close to industry averages. The second statement is also incorrect. The target capital structure is more of a floating range, and the firm may deviate slightly from the target when raising capital to exploit short-term opportunities in a particular financing source.

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### Question #49 of 66

Question ID: 462661

Gervase Jackson is a student in corporate finance class. Jackson is unsure how debt ratings tie into a company's capital structure and decides to talk to his professor after class. In their discussion, the professor makes the following statements:

Statement 1: The most common way that firms use debt ratings in conjunction with capital structure is to set a certain minimum debt rating that the firm strives to stay above at all times.

Statement 2: A change in debt rating from investment grade to speculative grade will significantly increase the firm's cost of debt capital.

With respect to the statements made by Jackson's professor:

- ☐ **A) only one is correct.**
- ☐ **B) both are incorrect.**
- ☒ **C) both are correct.**

### Explanation

Both of the statements made by Jackson's professor are correct. Managers generally want to maintain the highest debt rating possible because higher debt ratings will result in lower costs of capital. Managers are aware that a drop in debt rating may increase capital costs, so that is generally something the managers will avoid. Also, a change in debt rating from investment grade to speculative grade is particularly harmful for the firm's cost of capital because a drop to speculative grade will classify the debt as "junk" which will generally result in a significant increase in capital costs.

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### Question #50 of 66

Question ID: 462659

Katherine Epler, a self-employed corporate finance consultant, is preparing a new seminar concerning debt ratings and how they impact capital structure policy. As she is working on her presentation, Epler prepares two presentation slides that contain the following:

Slide 1: Lower debt ratings will increase the cost of debt as well as the cost of equity financing.

Slide 2: Managers would prefer to have the highest possible debt ratings.

With respect to Epler's slides:

- ☒ A) only one is correct.
- ☒ B) both are incorrect.
- ☒ C) both are correct.

### Explanation

The information on both of Epler's slides is correct. Lower debt ratings signifies higher risk to both debt and equity capital providers and will cause both to demand higher returns on their investment. Also, managers will always prefer the highest possible debt rating because higher debt ratings will result in lower costs of capital.

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### Question #51 of 66

Question ID: 462655

Zoltan DeJainus is the Chief Financial Officer of Hilliard Veterinary Products (HVP). In a discussion with HVP's management team about the firm's capital structure, DeJainus makes the following comments:

Comment 1: HVP's target capital structure is the same as its optimal capital structure.

Comment 2: If market value fluctuations cause the firm's actual capital structure to vary from the target capital structure, HVP should buy or sell its own stock or bonds as necessary to make sure that the capital structure remains at its optimal level.

Should the members of HVP's management team agree or disagree with each of DeJainus' comments?

- ☒ A) Agree with only one.
- ☒ B) Disagree with both.
- ☒ C) Agree with both.

### Explanation

The management team should agree with DeJainus' first comment. For managers trying to maximize the value of the firm, the

target capital structure will be the same as the optimal capital structure. The management team should disagree with the second comment. In practice, a firm's actual capital structure will float around its target. One of the reasons for floating around the target is market value fluctuations. The target capital structure serves as a guide for making decisions about how to raise additional capital, but unless there is an extreme circumstance, there is no need for a firm to make transactions to keep the capital structure exactly on target.

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## Questions #52-57 of 66

Bavarian Crème Pies (BCP) has been baking and selling cakes, pies, and other confectionary items for more than 150 years. The company started out, like many firms, as a small Mom and Pop operation. Today the firm has more than 4500 employees at 10 facilities in Germany, France, Belgium, and Holland. BCP's stock has recently been under considerable pressure, and is trading at a 15-year low. The Bank of Munich, the firm's primary lender and also a major stockholder, has succeeded in forcing BCP's CEO into accepting an early retirement package.

The new CEO, Dietmar Schulz, is attempting to turn around the firm's loss of market value, and reviving the attractiveness of the firm as an investment. BCP's sales have been strong, growing by more than 5 percent during the past year to a new record. Firm profits, while not growing at the pace he believes that they can, remain positive, and measures of profitability remain within what he considers to be acceptable bounds. Therefore, he believes that the firm's valuation problem may emanate from the choice of capital structure, which is currently 30 percent equity and 70 percent debt.

Because of their financial interest in the firm, the Bank of Munich has made it clear that they will provide whatever assistance they can to help the effort. Schulz has enlisted the services of one of the bank's corporate finance team, Katarina Iben, CFA. Iben has advised other bank customers regarding capital structure, and has helped them to devise plans to improve shareholder value. Schulz has begun to prepare a list of topics that he wants to address with Iben when she meets with BCP's finance staff on Friday.

On the top of the list of questions is the matter of whether or not the sources of a firm's capital can affect firm value. Schulz recalls that during his days as a master's degree student at the London School of Economics his professors told about the M and M theories regarding capital structure. As it has been some time since he has thought about these theories, he plans to ask Iben to discuss them with his staff.

Schulz also recalls that many theoretical concepts are based upon assumptions about markets and market frictions. He is concerned that, whatever the outcome of the finance staff's discussions with Iben, any decisions made by BCP must remain grounded in the real world so that he can defend them to his board and to shareholders. To this end, he plans to foster a discussion with Iben and his staff concerning some of the practical matters that pertain to the firm's capital structure in the real world.

Three days later Iben has arrived at BCP's headquarters for the big meeting. Schulz opens the discussion by asking Iben to characterize the main objective concerning capital structure, and how one might go about assessing whether or not BCP was anywhere near meeting this objective.

## Question #52 of 66

Question ID: 462625

Which of the following statements correctly characterizes the main objective of the capital structure decision?

- ☒ A) Minimize firm risk.
- ☒ B) Maximize the WACC.
- ☒ C) Maximize firm value.

### Explanation

The objective of the firm's capital structure decision should be to maximize firm value. (Study Session 8, LOS 26.a)

### Question #53 of 66

Question ID: 462626

Which of the following statements *most* correctly characterizes MM proposition 1?

- ☐ A) Increasing the use of relatively lower cost debt causes the required return on equity to increase such that the overall cost of capital is unchanged.
- ☐ B) Firms have a preference ordering for capital sources, preferring internally-generated equity first, new debt capital second, and externally-sourced equity as a last resort.
- ☒ C) Regardless of how the firm is financed, the overall value of the firm and aggregate value of the claims issued to finance it remain the same.

### Explanation

MM proposition 1 states that regardless of how the firm is financed, the overall value of the firm and aggregate value of the claims issued to finance it remain the same. (Study Session 8, LOS 26.a)

### Question #54 of 66

Question ID: 462627

Which of the following statements *most* correctly characterizes MM proposition 2?

- ☒ A) Increasing the use of relatively lower cost debt causes the required return on equity to increase such that the overall cost of capital is unchanged.
- ☐ B) Regardless of how the firm is financed, the overall value of the firm and aggregate value of the claims issued to finance it remain the same.
- ☐ C) Firms will seek to use debt financing up to the point that the value of the tax shield benefit is outweighed by the costs of financial distress.

### Explanation

MM proposition 2 states that increasing the use of relatively lower cost debt causes the required return on equity to increase such that the overall cost of capital is unchanged. (Study Session 8, LOS 26.a)

### Question #55 of 66

Question ID: 462628

Which of the following items is *least likely* to be a cost that has the potential to influence capital structure decisions?

- ☒ A) Homogeneous expectations.
- ☐ B) Financial distress.
- ☐ C) Agency.

### Explanation

Financial distress costs, agency costs, and the costs associated with asymmetric information are all factors that have the potential to influence capital structure. Homogeneous expectations is an assumption that underlies the MM capital structure propositions. (Study Session 8, LOS 26.a)

### Question #56 of 66

Question ID: 462629

The main outcome of the static trade-off theory is:

- ☐ A) the value of the firm is not affected by the choice of capital structure.
- ☒ B) there is an optimal capital structure.
- ☐ C) there is no optimal capital structure.

#### Explanation

The main conclusion of the static trade-off theory is that there is an optimal capital structure, and that this is based upon the firm's characteristics. Firms will seek to use debt financing up to the point that the value of the tax shield benefit is outweighed by the costs of financial distress. The value of the tax shield is a function of the firms' tax rate, and the costs of financial distress are a function of the nature of the firm's business. (Study Session 8, LOS 26.a)

### Question #57 of 66

Question ID: 462630

Which of the following factors is *least* applicable when an analyst is attempting to assess whether a firm's capital structure is value maximizing?

- ☐ A) The quality of the firm's corporate governance.
- ☒ B) The proximity of the current structure to the stated target.
- ☐ C) Changes in the structure over time.

#### Explanation

Even if the current structure is consistent with the firm's stated target capital structure, this does not ensure that it is value maximizing. The other items listed can provide useful information regarding whether the firm's existing capital structure is optimal. (Study Session 8, LOS 26.d)

### Questions #58-63 of 66

Bijou and Stephenson are old buddies both who have retired from careers in finance. Now in their 70s they like to meet once a week to discuss current affairs and finance related topics over a game of dominoes.

Bijou excitedly tells Stephenson that his grandson (Mihir) has got his first job working at a corporate finance house. Mihir is assessing the cost of capital in three different countries and has asked Bijou if he can help him with any insights.

The data Mihir has collect is as follows:

#### Country 1 Company: Carnegie Inc

	Scenario 1	Scenario 2	Scenario 3
Proportion of debt	0%	50%	80%
Cost of Equity	12%	16%	28%
Cost of Debt	8%	8%	8%

#### Country 2 Company: Sapata Inc

	Scenario 1	Scenario 2	Scenario 3
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<b>Proportion of debt</b>	0%	50%	80%
<b>Cost of Equity</b>	15%	16%	18%
<b>Cost of Debt</b>	10%	12%	16%

Country 3 Company Fisher Ltd

	<b>Scenario 1</b>	<b>Scenario 2</b>	<b>Scenario 3</b>
<b>Proportion of debt</b>	0%	50%	80%
<b>Cost of Equity</b>	15%	16%	18%
<b>Cost of Debt</b>	10%	10%	10%

Stephenson turns to Bijou and says "It's all well and good to study M&M leverage theory but we must remember that it had a lot of restrictive assumptions. For example M&M's study assumed that capital markets are perfectly competitive and investors have homogenous expectations.

Bijou agrees with Stephenson but points out "The purpose of M&M is to tell us that in the real world capital structure matters precisely because one or more of these assumptions is violated. Once you introduce financial distress, irrational investors you move closer and closer to static trade off theory."

Mihir joins the discussion and noted that his supervisor mentioned the cost of asymmetric information increases as more debt is added to the firm's capital structure. Stephenson responds "The manager is confused as according to the Pecking Order theory the cost of asymmetrical information increases as we add more equity."

## Question #58 of 66

Question ID: 462646

Country 1 is most consistent with?

- ☒ A) Static trade off theory
- ☒ B) M&M Propositions with tax
- ☒ C) M&M Propositions without tax

Explanation

Country 1 WACC

Scenario 1: WACC =  $r_e$  = 12%

Scenario 2: WACC =  $(0.5 \times 8\%) + (0.5 \times 16\%) = 12\%$

Scenario 3: WACC =  $(0.8 \times 8\%) + (0.2 \times 28\%) = 12\%$

Not that the WACC is constant regardless of capital structure which is consistent with M&M in a zero tax world.

Note that the cost of debt is constant regardless of leverage (no financial distress) and as a result static trade off theory could instantly have been rejected.

(Study Session 8, LOS 26.a)

## Question #59 of 66

Country 2 is most consistent with?

- ☒ A) M&M Propositions with tax
- ☐ B) Static trade off theory
- ☒ C) M&M Propositions without tax

Explanation

Country 2 WACC

Scenario 1:  $r_e = WACC = 15\%$

Scenario 2:  $WACC = (0.5 \times 16\%) + (0.5 \times 12\%) = 14\%$

Scenario 3:  $WACC = (0.2 \times 18\%) + (0.8 \times 16\%) = 16.4\%$

Notice that as leverage increases, initially WACC begins to fall but at higher leverage it starts to rise. This would suggest that there is an optimal capital structure that minimizes the WACC. Also the fact that the cost of debt rose as leverage increased indicates financial distress which would be found according to static trade off theory.

(Study Session 8, LOS 26.a)

### Question #60 of 66

Question ID: 462648

Country 3 is most consistent with?

- ☒ A) Static trade off theory
- ☐ B) M&M Propositions with tax
- ☒ C) M&M Propositions without tax

Explanation

Country 3 WACC

Scenario 1:  $r_e = WACC = 15\%$

Scenario 2:  $(0.5 \times 16\%) + (0.5 \times 10\%) = 13\%$

Scenario 3:  $(0.2 \times 18\%) + (0.8 \times 10\%) = 11.6\%$

Notice that as leverage increases the WACC is falling indicating support for M&M with tax model. Note that static trade off can't apply as the cost of debt is constant as leverage increases.

(Study Session 8, LOS 26.a)

### Question #61 of 66

Question ID: 462649

Regarding Bijou and Stephenson's comments on M&M and leverage theory:

- ☒ A) Both comments are correct
- ☒ B) Neither comment is correct
- ☒ C) One comment is correct

### Explanation

Both statements are correct. M&M theory does assume perfect capital markets. The purpose is of course to indicate the idea capital structure in these theoretical situations. We can then relax the assumptions and move towards static trade of theory.

(Study Session 8, LOS 26.a)

### Question #62 of 66

Question ID: 462650

Which factor(s) Bijou and Stephenson would least likely need to consider when evaluating a firm's capital structure?

- ☒ A) Capital structure of competitors with similar business risk
- ☒ B) Changes in the firm's capital structure over time
- ☒ C) Factors affecting agency costs such as credit ratings

### Explanation

Corporate governance issues affect agency costs

(Study Session 8, LOS 26.d)

### Question #63 of 66

Question ID: 462651

Regarding Mihir's and Stephenson's comments on the cost of asymmetric information:

- ☒ A) Mihir's supervisor is correct
- ☒ B) Stephenson is correct
- ☒ C) Neither comment is correct

### Explanation

Stephenson's comment is correct. Managers prefer financing choices that signal least amount of information to the market.

(Study Session 8, LOS 26.a)

### Question #64 of 66

Question ID: 462607

According to pecking order theory, which financing choice is *most* preferred, and which is *least* preferred?

#### Most preferred

#### Least preferred

- |                                                                   |            |
|-------------------------------------------------------------------|------------|
| <input checked="" type="checkbox"/> A) Internally generated funds | New debt   |
| <input checked="" type="checkbox"/> B) Internally generated funds | New equity |
| <input checked="" type="checkbox"/> C) New debt                   | New equity |

### Explanation

Pecking order theory is related to the signals management sends to investors through its financing choices. Financing choices follow a hierarchy based on visibility to investors with internally generated funds being the least visible and most preferred, and issuing new equity as the most visible and least preferred.

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### Question #65 of 66

Question ID: 462664

Which one of the following statements about a firm's capital structure is *most* accurate? The optimal capital structure:

- ✓ **A) maximizes the stock price, minimizes the weighted average cost of capital (WACC).**
- ✗ **B) maximizes expected earnings per share (EPS), maximizes the price per share of common stock.**
- ✗ **C) minimizes the required rate on equity, maximizes the stock price.**

#### Explanation

The firm's optimal capital structure is the one that balances the influence of *risk and return* and thus maximizes the firm's stock price. Return: this *optimal capital structure will maximize the firm's stock price*. Risk: at the optimum level, the cost of capital (as reflected in WACC) is also minimized.

A firm's target capital structure is the debt to equity ratio that the firm tries to maintain over time. Should the firm's current debt ratio fall below the target level, new capital needs will be satisfied by issuing debt. On the other hand, if the debt ratio is greater than the target level, the firm will raise new capital by retaining earnings or issuing new equity. When setting its target capital structure, the firm must weigh the tradeoff between risk and return associated with the use of debt. The use of debt increases the risk borne by shareholders. However, using debt leads to higher expected rates of return by shareholders. The higher risk associated with debt will depress stock prices, while the higher expected return will increase stock prices. Thus, the firm's optimal capital structure is the one that balances the influence of risk and return and thus maximizes the firm's stock price. The optimal debt ratio will be the firm's target capital structure.

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### Question #66 of 66

Question ID: 462657

A firm's capital structure affects:

- ✗ **A) default risk but not return on equity.**
- ✓ **B) return on equity and default risk.**
- ✗ **C) return on equity but not default risk.**

#### Explanation

A firm's capital structure affects both its return on equity and its risk of default.