

Question #1 of 45

Question ID: 462680

In a world with taxes and brokerage costs:

- ✓ **A) dividend policy may be relevant.**
- x **B) Modigliani and Miller say that dividend policy is relevant.**
- x **C) Modigliani and Miller say that dividend policy is irrelevant.**

Explanation

Modigliani and Miller assume a world without taxes and transaction costs. They (correctly) claim that the validity of their theory should be judged on empirical tests, not the realism of their assumptions. Myron Gordon and John Lintner have championed the "bird-in-the-hand" theory, which gives greater value to firms with high dividend yields because investors perceive dividends to be less risky than capital gains.

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Question ID: 462699

The Skubin Candy Company is a highly profitable and rapidly growing maker of chocolates and other confections. Skubin's management team is considering various dividend policies and is most concerned about the possibility of the dividend amount decreasing from one year to another and the negative reaction from investors that such a decrease may cause. Under which dividend policy would Skubin's dividend be *most likely* to decline in a given year?

- ✓ **A) Residual dividend.**
- x **B) Longer-term residual dividend.**
- x **C) Target payout ratio.**

Explanation

Since Skubin Candy Corporation is a profitable, rapidly growing company, a target payout policy is likely to lead to consistent dividend increases. A residual dividend approach, however, could lead to a decrease in the dividend if the company has sufficient positive NPV investment opportunities, thus leaving fewer dollars available for dividend payments.

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Question ID: 462704

Stargell Industries follows a strict residual dividend policy. The company has a capital budget of \$3,000,000. It has a target capital structure that consists of 30% debt and 70% equity. The company forecasts that its net income will be \$3,500,000. What will be the company's expected dividend payout ratio this year?

- ✓ **A) 40%.**
- x **B) 35%.**
- x **C) 30%.**

Explanation

In order to maintain the optimal capital structure, new projects will be financed with the same mix of debt and equity. Therefore, if the capital budget is \$3,000,000 for next year the equity portion will be 70% of \$3,000,000, or \$2,100,000. The remainder will be financed with debt. If Net Income is \$3,500,000 then dividends will be \$1,400,000. (Dividends = Net Income – equity portion of capital budget = \$3,500,000 – \$2,100,000). The dividend payout ratio is equal to dividends divided by net income. $\$1,400,000 / \$3,500,000 = 0.40$ or 40%.

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Question ID: 462698

Which of the following statements regarding dividend policies is CORRECT?

- ✓ **A) Companies using a longer-term residual dividend policy pay a steady dividend based on long-term forecast of their capital budget.**
- x **B) A constant payout ratio approach is likely to result in a lower risk premium assigned to a company by investors.**
- x **C) Companies following a dividend stability policy seek to pay a constant dollar amount per share over a long period of time.**

Explanation

Companies following a longer-term residual dividend approach forecast their capital budget over a longer time frame (5-10 years). Leftover earnings over this period are allocated as dividends and paid out in relatively equal amounts each year. The other statements are incorrect. With a stable dividend policy, companies seek to increase their dividend each year at a constant rate. A constant payout approach means that dividends will vary in proportion with earnings, likely resulting in volatile dividends and a higher risk premium.

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Question ID: 462687

According to the "cliente effect" of dividend policy, which of the following groups is *most likely* to be attracted to low dividend payouts?

- ✓ **A) High-income individual investors.**
- x **B) Tax exempt pension funds.**
- x **C) Corporations exempt from taxes on 85% of dividend income.**

Explanation

High-income individuals in high tax brackets would prefer capital gains over dividends as they have the greatest benefit from deferral of taxes.

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Question ID: 462689

Which of the following statements about dividend policy and capital structure is *most* accurate?

- ☐ A) A person who believes in the clientele effect and a proponent of the "bird-in-hand" theory would have similar views on dividend payout policy.
- ☐ B) Monte Carlo simulation is used to estimate market risks; scenario analysis measures stand-alone risk.
- ☒ C) Investors view a stock repurchase as a positive signal and a stock issue as a negative signal.

Explanation

Investors view a stock repurchase as a positive signal and a stock issue as a negative signal. A repurchase may mean that management believes the stock is undervalued. To understand why a stock issue is viewed negatively, consider the following circumstances: A biotech company has a new blockbuster drug that will increase its profitability, but to produce and market the drug, the company needs to raise capital. If the company sells new stock, then as sales (and thus profits) occur, the price of the stock will rise. The current shareholders will do well but not as well as they would have had the company not sold more stock before the share price increased. Thus, it is assumed that management will prefer to finance growth with non-stock sources.

The other statements are false. A person who believes in the clientele effect and a proponent of the "bird-in-hand" theory would *not* have similar views on dividend policy. The clientele effect suggests that different groups of investors want different dividend levels (often based on tax status), and through the law of supply and demand, investors will select companies that meet their needs. Thus, dividend payout policy does not matter. According to the "bird-in-hand" theory, investors prefer dividends to capital appreciation because they view the former (D_1 / P_0) as less risky than the latter (g, or growth rate).

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Question ID: 462692

Which of the following is *most likely* to prompt a company to increase dividend payments? A company's management foresees:

- ☐ A) continued volatility of the company's earnings.
- ☐ B) reduced availability of credit in the market.
- ☒ C) an immediate lack of profitable investment opportunities.

Explanation

When earnings are volatile, companies are more hesitant to increase dividends, as there are greater chances that a higher dividend may not be covered by future earnings. When there is reduced availability of credit in the market, a strong cash position—such as might be gained from cutting dividends—is a benefit. A company that foresees few profitable investment opportunities tends to pay out more in dividends, since these opportunities would otherwise be funded with cash flows from earnings.

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Question ID: 462691

Which of the following is *least likely* to discourage a company from making high dividend payouts? The company's:

- ☒ A) shareholders are primarily tax-exempt institutions.
- ☐ B) flotation costs are high.
- ☐ C) bondholders are protected by strong debt covenants.

Explanation

Taxes on dividends are one factor that sometimes discourages companies from paying dividends, however if most shareholders are tax exempt, tax considerations are unlikely to discourage a company from making dividend payouts. A company with high flotation costs is less likely to pay out high dividends, to ensure that projects can be financed through earnings and to thus avoid the expense of issuing new shares. Bondholders are often contractually protected from high dividend payouts; strong debt covenants are likely to prevent the company from making high dividend payouts.

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Question ID: 462696

International Pulp, a Swiss-based paper company, has annual pretax earnings (in Swiss francs) of SF 600. The corporate tax rate on retained earnings is 55%, and the corporate tax rate that applies to earnings paid out as dividends is 30%. Furthermore, International Pulp pays out 30% of its earnings as dividends, and the individual tax rate that applies to dividends is 40%.

What is the effective tax rate on corporate earnings paid out as dividends?

- ☒ A) 48%.
- ☐ B) 70%.
- ☒ C) 58%.

Explanation

This is an example of a split-rate corporate tax system. The calculation of the effective tax rate on a Swiss franc of corporate income distributed as dividends is based on the corporate tax rate for distributed income.

The effective tax rate on income distributed as dividends = $30\% + [(1 - 30\%) \times 40\%] = 58\%$.

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Question ID: 462703

Under the residual dividend model, firms financed with 100% equity would do all of the following EXCEPT:

- ☒ A) borrow money to maintain the dividend payout schedule.
- ☐ B) determine their optimal capital budgets.
- ☐ C) pay dividends only if more earnings are available than needed to support the optimal capital budget.

Explanation

Under the residual dividend model the optimal dividend payout is a function of four factors: investors' preferences for dividends vs. capital gains, the firm's investment opportunity schedule (IOS), the firm's target capital structure, and the availability and cost of external capital to the firm. The firm will pay dividends only if more earnings are available than are needed to support the optimal capital budget.

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Question ID: 462701

Last year, Calfee Multimedia had earnings of \$4.00 per share and paid a dividend of \$0.30. In the current year, the company expects to earn \$5.20 per share. Calfee has a 30% target payout ratio. If the expected dividend for this year is \$0.39, what time period is Calfee *most likely* using in order to bring its dividend up to the target payout?

- ☐ A) 8 years.
- ☒ B) 4 years.
- ☐ C) 3 years.

Explanation

The formula to determine the expected dividend in a target payout approach is:

Expected dividend = (previous dividend) + [(expected increase in EPS) × (target payout ratio) × (adjustment factor)], where the adjustment factor is 1 / number of years over which the adjustment will take place.

Using the numbers given:

$$\$0.39 = \$0.30 + [(\$5.20 - \$4.00) \times (0.30) \times (1 / n)]$$

$$\$0.39 = \$0.30 + [(\$1.20) \times (0.30) \times (1 / n)]$$

$$\$0.09 = \$0.36 \times (1 / n)$$

$$0.25 = (1 / n)$$

$$n = 4$$

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Question ID: 462684

In a recent lecture at a seminar titled "Dividends - Do They Really Matter?", Matthew Janowski, CFA, made the following two statements regarding the information content in dividend policy changes across countries:

Statement 1: In the U.S., investors infer that small changes in dividends do not send a major signal about a company's future prospects to existing and potential shareholders.

Statement 2: In Asian countries such as Japan, investors are unlikely to assume that even a large change in dividend policy signals anything about a company's future prospect.

With respect to Janowski's statements:

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

Explanation

The information content in dividend policy changes is viewed differently across countries. In the U.S., investors infer that even small changes in a dividend send a major signal about a company's future prospects. Thus, Statement 1 is incorrect. However, in Asian countries such as Japan, investors are less likely to assume that even a large change in dividend policy signals anything about a company's future prospect. As a result, Asian companies are freer to raise and lower their dividends as circumstances change without concerns over how investor reactions may affect the stock price. Therefore, Statement 2 is correct.

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Question ID: 462705

Tina Donaldson is the Chief Financial Officer for Outback Supply Corporation (OSC). OSC is considering revising its dividend payout policy and Donaldson has been asked by the board of directors to suggest alternatives for the board to consider.

Donaldson prepares a memo listing the benefits of a residual dividend model. The memo includes three key points:

Point 1: A residual dividend policy is simple for the company to use and easy to implement.

Point 2: The residual dividend approach allows management to determine investment opportunities without having to take dividends into consideration.

Point 3: Because the firm is maximizing its positive net present value opportunities with a residual dividend model, investors are likely to perceive the firm as having less risk.

Which of Donaldson's points describing advantages of the residual dividend approach are *most* accurate?

☒ A) Points 1, 2, and 3.

☒ B) Point 2 only.

☒ C) Points 1 and 2 only.

Explanation

The residual dividend approach is easy for a company to use and implement - the company simply reinvests earnings needed to maintain and grow the business, and pays out any left over earnings out as dividends. The residual dividend approach also allows management to determine investment opportunities without having to take dividends into consideration. Note that the residual dividend approach is likely to lead to dividends that fluctuate dramatically from year to year. Since investors prefer stable dividends, they are likely to perceive a firm following a residual dividend approach as having greater risk, which is one of the disadvantages of the approach.

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Question ID: 462710

Which of the following statements about differences observed in payout trends in US and Europe is *most* accurate?

☒ A) The percentage of companies making stock repurchases has been trending downwards both in the US and Europe.

☒ B) A lower proportion of US companies pay dividends as compared to their European counterparts.

☒ C) A higher proportion of US companies pay dividends as compared to their European counterparts.

Explanation

A lower proportion of US companies pay dividends as compared to their European counterparts. The percentage of companies making stock repurchases has been trending upwards in the US (since 1980s), the UK and continental Europe (since 1990s).

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Question ID: 462714

Which of the following is *most likely* to be a symptom of a company that is able to sustain its cash dividend?

- ☐ A) A high dividend payout ratio compared to the industry average.
- ☐ B) Issuing new debt to fund projects and cover capital expenditures.
- ☒ C) A low dividend yield compared to the company's historic average.

Explanation

High dividend yields compared to the company's record suggest that investors are expecting dividends to be cut. Net borrowings are not sustainable, and will eventually require a cut in share repurchases and dividends. A higher-than-average dividend payout ratio creates the risk that dividends may be cut if earnings decline.

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If Modigliani and Miller's dividend irrelevancy theory is correct, what is the impact on a firm's cost of capital and share price if its dividend payout increases?

Cost of Capital Share Price

- ☐ A) None A decrease
- ☒ B) None None
- ☐ C) An increase A decrease

Explanation

If investors do not consider dividends to be relevant, the dividend payout will not affect the required rate of return. If the required rate of return does not change, the value of a firm will be unchanged despite the change in its dividend payout rate.

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Question ID: 462686

Faltys Asset Management (FAM) follows a dividend growth investment strategy. The Faltys Dividend Growth Fund only invests in companies that have a dividend yield greater than the S&P 500 and have the potential to increase that dividend each year at a rate that exceeds inflation. Warren Berlin, Director of Marketing for FAM has been developing a presentation book to present the fund to prospective clients. These prospective clients include retired individuals who want dividend income and trust companies who manage trust accounts which provide income to be distributed to beneficiaries. Which of the following dividend theories *best* describes the investment strategy and the marketing strategy of the fund?

Investment Strategy Marketing Strategy

- ☐ A) Bird-in-the-hand Modigliani and Miller
- ☒ B) Stable dividend Clientele effect
- ☐ C) Signaling effect Bird-in-the-hand

Explanation

The investment strategy would best be described as a stable dividend strategy. A stable dividend policy means that a company's dividend payout is aligned with company's long-term growth rate such that there is *stability in the rate of increase for the dividend*. The marketing strategy would *best* be described as the clientele effect. Berlin is pursuing specific groups of investors that prefer dividends. Note that the bird-in-the-hand theory states that investors prefer the certainty of dividends now to uncertain capital gains in the future, while Modigliani and Miller proposed that dividend policy has no impact on the price of a firm's stock.

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Question ID: 462707

Hikaru Takei is the portfolio manager for the Reliant Dividend Focused Fund. Takei wants to add a firm to his portfolio that follows a stable dividend policy. Takei is considering investing in one of three companies:

- Kirk Beauty Supplies maintains a constant dividend payout of 25 to 30%.
- Kelley Medical Devices increases its dividend each year in accordance with the company's long run growth rate of 4%.
- Barrett Satellite Systems has maintained a dividend of \$2.00 per share over the last 6 years.

Which stock *best* meets Takei's criteria?

- ☐ A) Kirk Beauty Supplies.
- ☐ B) Barrett Satellite Systems.
- ☒ C) Kelley Medical Devices.

Explanation

Due to inflation considerations, a company with a stable dividend policy will have stability in the rate of increase for its dividend each year. This typically means aligning the company's dividend growth rate with its long-term growth rate. Although the company with the fixed per share dividend is a tempting choice, once inflation is considered, a fixed \$2.00 per share dividend is actually declining each year in terms of spending power.

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Question ID: 462694

Tecnolotronix is an equipment manufacturer in a volatile, cyclical industry that employs a long-term residual dividend approach. A surprise increase in quarterly profits would be *most likely* to have which of the following immediate effects on the actual measured payout ratio?

- ☒ A) A decrease in the ratio.
- ☐ B) An increase in the ratio.
- ☐ C) No change in the ratio.

Explanation

If a profit increase is seen by management to be a temporary increase, it is unlikely to prompt an increase in the level of dividend payout: a firm using the long-term residual dividend approach would not generally raise dividends in response to a short-run profit increase. Since the payout ratio is calculated as Dividend / Earnings, and earnings have temporarily increased, the calculated payout ratio should fall in the short term.

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Question ID: 462695

Laura's Chocolates Inc. (LC) is a maker of nut-based toffees. LC is considering a cash dividend, but is concerned about the "double taxation" effect on their shareholders. If the corporate tax rate is 35%, and the tax on dividends is 20%, what is the effective tax rate on a dollar of corporate earnings?

- ✓ A) 48%.
- x B) 42%.
- x C) 55%.

Explanation

$$0.35 + (1 - 0.35)(0.20) = 48\%$$

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Question ID: 462683

One year ago, Makato Omura purchased a 6.50% fixed coupon bond for 98.50. Recently, she sold the bond for 99.25 and calculated her return at 7.4%. Her friend, Takanino Takemiya, CFA, reminds Omura that this is the nominal return and that to calculate the real return, she needs to factor in the inflation rate over the holding period. If the price index for the current year is 118.5 and the price index one year ago was 115.9, Omura's real return is *closest* to:

- x A) 9.6%.
- ✓ B) 5.2%.
- x C) 6.3%.

Explanation

Omura's real return is approximated by subtracting the inflation rate from the calculated (nominal) return. The inflation rate is calculated using the formula:

$$\text{Inflation} = (\text{Price Index}_{\text{this year}} - \text{Price Index}_{\text{last year}}) / \text{Price Index}_{\text{last year}}$$

Here, inflation = $(118.5 - 115.9) / 115.9 = 0.0224$, or approximately 2.2%.

Thus, the real return = $7.4\% - 2.2\% = 5.2\%$.

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Question ID: 462708

Belden Engineering Corporation (BEC) is considering a share repurchase program. David Gudzenski, the firm's executive vice president prepares a memo to the board of directors detailing reasons why a share repurchase would be favorable at this time. Reasons listed in the memo are as follows:

Reason 1: The resulting capital structure from the share repurchase would be more favorable for investors in BEC's bonds.

Reason 2: BEC's stock is currently selling at \$37 in the marketplace. Our discounted cash flow analysis values the company at \$48 per share.

Reason 3: The share repurchase could be used to offset dilution caused by the exercise of employee stock options.

Reason 4: BEC can use the repurchase to send a signal to investors that management has a positive future outlook for the

company.

Reason 5: The share repurchase could be used to implement a residual dividend policy while diminishing the potential increase in perceived risk that such a policy would cause for investors.

Which of Gudzanki's reasons in favor of the share repurchase is *most* accurate?

- ✓ **A) Reasons 2, 3, 4, and 5.**
- x **B) Reasons 1 and 3 only.**
- x **C) Reasons 2 and 3 only.**

Explanation

A share repurchase would decrease the percentage of equity in a firm's capital structure, which would in turn increase the percentage of debt. An increase in debt would add more leverage to the firm which would be negative for the firm's bondholders. The other reasons listed are all rationales for a share repurchase.

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Question ID: 462690

Dividend payments are *most likely* to be associated with:

- ✓ **A) increased agency conflict between bondholders and shareholders.**
- x **B) increased agency conflict between shareholders and managers.**
- x **C) increased agency conflict between bondholders and managers.**

Explanation

Paying dividends can be helpful in reducing agency conflicts between shareholders and managers because dividend payouts constrain managers' ability to invest in negative NPV projects that benefit the managers at the expense of shareholders.

Paying dividends is likely to intensify the agency conflict between bondholders and shareholders, as it represents a transfer of wealth from bondholders to shareholders.

There is no agency conflict between bondholders and managers.

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Question ID: 462609

Global Development expects to earn \$6 million next year. 40% of this amount, or \$2.4 million, has been allocated for distribution to common shareholders. There are 2.4 million shares outstanding, and the market price is \$30 a share. If Global uses the \$2.4 million to repurchase shares at the current price of \$30 per share, its share price after the repurchase will be *closest* to:

- x **A) \$29.00.**
- x **B) \$31.00.**
- ✓ **C) \$30.00.**

Explanation

Market value of equity before the repurchase is $\$30 \times 2.4 \text{ million} = \72 million .

Shares Repurchased = $\$2.4 \text{ million} / \$30 = 80,000 \text{ shares}$.

Shares remaining = Shares outstanding – Shares repurchased = $2,400,000 - 80,000 = 2,320,000$.

Share price after the repurchase = $(\$72 \text{ million} - \$2.4 \text{ million}) / 2,320,000 = \30 .

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Question ID: 462711

Dan Bridges, head of equity strategies for Paca Inc. a consultant to institutional investors makes the following statement:

Globally, the developed markets have seen a decline in dividend payout ratios over time. Lately, we have also seen an increase in the proportion of companies engaging in share repurchases.

Bridges' statement is *most likely*:

- ☒ A) Incorrect as to dividend payout ratios.
- ☒ B) Correct.
- ☒ C) Incorrect as to companies engaging in share repurchases.

Explanation

Bridges' statement is correct.

Questions #26-31 of 45

Peter Lung is the CFO for Moore Industries. Lung is new to the company and has been tasked by the company's board of directors to review the company's dividend policy. The reason for this request is that two board members have suggested changes be made to the dividend policy, but their suggested changes are in opposite directions.

One of the board members, Al Gormus, has suggested that the firm increase dividends so that the dividend payout ratio will be higher, but Harold Lee has suggested that the firm decrease dividends. The board has asked Lung to identify the effects of these suggested changes on the company's stock.

To investigate the firm's ability to pay dividends, Lung decides to look at the dividend coverage ratios based on earnings and cash flow. Lung has gathered the financial data below for the most recent two years. Additionally, he notes that the stock price was \$23.20 in 20X7 and \$20.08 in 20X6. The shares outstanding were 1.45 billion in 20X7 and 1.50 billion in 20X6.

(in \$millions)	20X7	20X6
Net income	1,783	2,195
Cash flow from operations	4,054	4,122
Capital expenditures	1,799	3,266
Net borrowing	(1,034)	(615)
Dividends paid	1,691	1,585
Stock repurchases	(176)	166

After analyzing the dividend coverage ratios, Lung begins work on his presentation to the board regarding the options for

paying dividends. One of the options that he wants the board to consider is a residual dividend policy. Lung has gathered the information below regarding the firm's 20X8 capital budgeting projects. Additionally, he has determined that the target capital structure is 60% equity and 40% debt. The after-tax cost of debt is 6.5%, and the cost of equity is estimated to be 12%.

Project	Size of project (\$m)	IRR
Project 1	\$500	12.0%
Project 2	\$700	11.0%
Project 3	\$300	10.0%
Project 4	\$1,000	9.0%
Project 5	\$600	8.0%

Lung also believes that the firm should use share repurchases to a greater extent. In his presentation he makes the following statements regarding share repurchases.

Statement 1: A share repurchase strategy can be combined with a residual dividend policy to maintain a low stable dividend. In years with more profitable projects, the firm's repurchases would be higher, while in years with fewer profitable projects, repurchases would be lower.

Statement 2: Share repurchases will increase the company's EPS.

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Question ID: 462674

Based on the bird-in-hand argument for dividend policy, Gormus' suggested dividend change will *most likely* result in:

- ☒ A) no change in the stock price.
- ☒ B) a decrease in the stock price.
- ☒ C) an increase in the stock price.

Explanation

The bird-in-hand argument for dividend policy argues that a stock's required return will decrease (and price will increase) as the dividend payout increases. Investors are more certain about dividend payments relative to capital gains, and require a lower rate of return for stocks that have a higher dividend payout ratio. (Study Session 9, LOS 28.b)

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Question ID: 462675

If the company implements Lee's suggested dividend change, assuming that the change was not anticipated by the market, the signal that this change would send to investors would *most likely* be:

- ☒ A) that the company's business prospects are weak.
- ☒ B) ambiguous and indiscernible to investors.
- ☒ C) that the company's business prospects are strong.

Explanation

Unexpected dividend decreases are regarded as negative signals about a company's prospects. Unexpected dividend increases generally signal to investors that a company's prospects are strong, while dividend initiations are ambiguous. (Study Session 9, LOS 28.b)

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Question ID: 462676

Based on the information collected by Lung, the 20X6 dividend payout ratio is *closest* to:

- ✓ A) 0.7.
- x B) 1.4.
- x C) 0.1.

Explanation

The dividend payout ratio is computed as dividends paid divided by net income. The dividend payout ratio for 20X6 is:

$$\text{dividend payout ratio} = \frac{1,585}{2,195} = 0.7221 \approx 0.7$$

(Study Session 8, LOS 31.i)

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Question ID: 462677

Based on the information collected by Lung, the FCFE coverage ratio for 20X7 is *closest* to:

- ✓ A) 0.8.
- x B) 0.7.
- x C) 1.4.

Explanation

The FCFE coverage ratio is computed as free cash flow to equity divided by the sum of dividends and share repurchases. The first step is to compute FCFE:

$$\text{FCFE} = \text{cash flow from operations} - \text{FCInv} + \text{net borrowings} = 4,054 - 1,799 + (1,034) = 1,221$$

where:

FCInv = fixed capital investment

The FCFE coverage ratio is then:

$$\text{FCFE coverage ratio} = \frac{1,221}{1,691 + (176)} = 0.8059 \approx 0.8$$

(Study Session 8, LOS 31.i)

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Question ID: 462678

If the firm's net income in 20X8 is \$1,500 and the firm follows a residual dividend policy, the dividend coverage ratio would be:

- x A) 1.67.
- ✓ B) 2.50.
- x C) undefined.

Explanation

The first step is to compute the WACC as follows:

$$\text{WACC} = w_d \times r_d(1 - t) + w_e \times r_e = 0.40 \times 6.5\% + 0.60 \times 12\% = 9.8\%$$

The firm will only invest in projects with IRRs that exceed the WACC (Projects 1, 2, and 3). The total investment is \$1,500 million, and the portion that will be funded from equity is \$900 ($= \$1,500 \times 0.60$). The remaining portion of net income, \$600 ($= \$1,500 - \900), will be paid out as dividends.

The dividend coverage ratio, which is computed as net income divided by dividends, is 2.50 ($= \$1,500 / \600). (Study Session 8, LOS 31.f, i)

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Question ID: 462679

Are Lung's statements regarding share repurchases CORRECT?

- ☒ A) Yes, both statements are correct.
- ☐ B) No, only one of the statements is correct.
- ☒ C) No, both statements are incorrect.

Explanation

Statement 1 is incorrect. In years with more profitable projects, the firm's repurchases will be lower as the firm will have less residual cash. In years with fewer profitable projects, repurchases would be higher.

Statement 2 is incorrect. Share repurchases will only increase the company's EPS if the after-tax cost of borrowing is less than the firm's earnings yield. In this case, the firm's after-tax cost of borrowing is 6.5%, and the firm's earnings yield for the most recent period is 5.3%. Therefore, share repurchases will actually decrease EPS.

$\text{EPS} = \$1,783\text{M} / 1.45\text{B shares} = \1.2297 per share

$\text{earnings yield} = \text{EPS} / \text{share price} = \$1.2297 / \$23.20 = 5.3\%$

(Study Session 9, LOS 28.g)

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Question ID: 462688

The clientele effect predicts that investors with high marginal tax rates and low desire for current income will be attracted to companies whose dividend policies promote:

- ☒ A) low dividends levels.
- ☐ B) low levels of share repurchase.
- ☐ C) low reinvestment of earnings.

Explanation

The clientele effect states that companies with low dividends will attract a clientele of investors with high marginal tax rates and low desires for current income.

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Question ID: 462702

A company is all equity financed, has a capital budget of \$2.0 million and earnings of \$1.8 million. If the company follows a residual dividend policy, the amount it will pay out in dividends is *closest to*:

- ☐ A) \$0.2 million.

☐ B) \$0.1 million.

☒ C) \$0.

Explanation

In the residual dividend model, dividends are based on earnings less funds the firm retains to finance the equity portion of its capital budget. The model is based on the firm's (1) investment opportunity schedule (IOS), (2) target capital structure, and (3) access to and cost of external capital. In this case, the capital budget exceeds earnings so there is no residual.

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Question ID: 462712

Dividend safety is *most likely* evidenced by:

☒ A) Increase in dividend and FCFE coverage ratios

☐ B) Increase in FCFE coverage ratio but not be dividend coverage ratio.

☐ C) Increase in dividend coverage ratio but not by FCFE coverage ratio.

Explanation

Both dividend and FCFE coverage ratios are indicators of dividend safety. FCFE coverage is simply more comprehensive measure and takes into account all cash distributed to shareholders.

Question #35 of 45

Question ID: 462685

At a recent conference, "Dividends – Are They Increasing?", several lecturers were discussing the signaling effect and their opinions on how changes in a company's dividend policy are often viewed by investors. Linda Travis, an equity analyst at Girthmore Capital Management and one of the guest lecturers at the conference, made the following observations:

Observation 1: A dividend initiation is always viewed as a positive signal by investors. It is an indication that the company has so much cash at its disposal that it can afford to pay it out to shareholders.

Observation 2: A dividend decrease is typically a positive signal by a company's management to its shareholders. It indicates that management has a variety of positive NPV projects in its capital budget and would like to finance as many of them as possible with retained earnings.

With respect to Travis' observations:

☐ A) both are correct.

☒ B) both are incorrect.

☐ C) only one is correct.

Explanation

A *dividend initiation* is often viewed differently by different investors. On one hand, a dividend initiation could mean that a company is sharing its wealth with shareholders - a positive signal. On the other hand, initiating a dividend could mean that a company has a lack of profitable reinvestment opportunities - a negative signal. *Dividend decreases or omissions* are typically negative signals that current and future earnings prospects are not good and that management does not think the current dividend payment can be maintained.

Question #36 of 45

Question ID: 436851

Which of the following statements about a stock repurchase is *least* accurate?

- ☐ A) Management can distribute cash to shareholders at a favorable after-tax rate.
- ☐ B) A stock repurchase occurs when a large block of stock is removed from the marketplace.
- ☒ C) Disgruntled stockholders are forced to sell their shares, improving management's position.

Explanation

A repurchase gives stockholders a choice. They can sell or not sell. Stock repurchase is also more tax-efficient as only those shareholders that choose to sell their shares would potentially have a tax liability.

Question #37 of 45

Question ID: 462682

According to Modigliani and Miller's dividend irrelevancy theory, an investor in a firm that does not pay a dividend can still earn a "dividend" on that company by:

- ☒ A) selling a portion of the company's stock each year.
- ☐ B) buying additional shares each year.
- ☐ C) contacting the firm and asking for a dividend payment.

Explanation

Miller and Modigliani's dividend irrelevancy theory states that shareholders can in theory construct their own dividend policy. If a firm does not pay dividends, a shareholder who wants a 4% dividend can "create" it by selling 4% of his or her stock. Note that Modigliani and Miller's theory does not allow for transaction costs or taxes. In actuality, shareholders will have to pay a brokerage commission on the sale and tax on any capital gains.

Question #38 of 45

Question ID: 414870

What is the impact on shareholder wealth of a share repurchase versus cash dividend of equal amount when the tax treatment of the two alternatives is the same?

- ☒ A) A share repurchase is equivalent to a cash dividend of an equal amount, so total shareholder wealth will be the same.
- ☐ B) A share repurchase will always lead to higher total shareholder wealth than a cash dividend of an equal amount.
- ☐ C) A share repurchase will sometimes lead to higher total shareholder wealth than a cash dividend of an equal amount.

Explanation

Assuming that the tax treatment of a share repurchase and a cash dividend of equal amount is the same, a share repurchase is equivalent to a cash dividend payment, and shareholder wealth will be the same.

Question #39 of 45

Question ID: 462706

The following financial data relates to the Carmichael Beverage Company for 2005:

- The target capital structure is 65% equity and 35% debt.
- After-tax cost of debt is 7%.
- Cost of retained earnings is estimated to be 12%.
- Cost of equity is estimated to be 13.5% if the company issues new common stock.
- Net income is \$4,000,000.

Carmichael Beverage Company is considering the following investment projects:

Project A: \$2,500,000 value; IRR of 11.50%

Project B: \$1,000,000 value; IRR of 13.00%

Project C: \$2,000,000 value; IRR of 9.50%

Project D: \$500,000 value; IRR of 10.50%

Project E: \$1,500,000 value; IRR of 8.00%

If the company follows a residual dividend policy, its payout ratio will be *closest* to:

- ☐ A) 0%.
- ☐ B) 12%.
- ☒ C) 35%.

Explanation

First determine the WACC. $WACC = w_d \times k_d(1 - t) + w_e \times k_s$, where k_s is the required return on retained earnings. $WACC = (0.65)(0.12) + (0.35)(0.07) = 0.078 + 0.0245 = 0.1025 = 10.25\%$. Second, decide to accept projects A, B, and D since they are all greater than the WACC. Accepting these projects will result in a total capital budget of $(\$2,500,000 + \$1,000,000 + \$500,000) = \$4,000,000$. The equity portion is $65\% \times \$4,000,000 = \$2,600,000$. From Carmichael's net income, $\$4,000,000 - \$2,600,000 = \$1,400,000$ will be left over for dividends, which implies a payout ratio of $\$1,400,000 / \$4,000,000 = 35\%$.

Question #40 of 45

Question ID: 462697

David Drakar and Leslie O'Rourke both own 100 shares of stock in a German corporation that makes 1.00 per share in pre-tax income. The corporation pays out all of its income as dividends. Drakar is in the 30% individual tax bracket while O'Rourke is in the 40% individual tax bracket. The tax rate applicable to the corporation is 30%. Drakar and O'Rourke live in the United Kingdom, which uses an imputation tax system for corporate dividends. What is the effective tax rate on the dividend for each shareholder, assuming no effects from the exchange rate?

Drakar

O'Rourke

- | | |
|---|-----|
| <input type="radio"/> A) 40% | 48% |
| <input type="radio"/> B) 38% | 44% |
| <input checked="" type="radio"/> C) 30% | 40% |

Explanation

Under an imputation tax system, taxes are paid at the corporate level, but are attributed to the shareholder, so that *all taxes are effectively paid at the shareholder rate*.

Question #41 of 45

Question ID: 462713

Grommetco produces plastic insulators for the electrical appliance industry. Excerpts from Grommetco's financial results for 2010 are as follows:

Net Income (earnings)	\$10
Free Cash Flow to Equity	\$8
Dividends Paid	\$1
Stock Repurchases	\$3

Which of the following statements is *most* accurate? Grommetco's:

- ✓ **A) FCFE coverage ratio is 2.0.**
- x B) dividend payout ratio is 0.4.
- x C) dividend coverage ratio is 2.5.

Explanation

Dividend coverage ratio = Net Income / Dividends = \$10 / \$1 = 10.

FCFE coverage ratio = FCFE / (dividends + share repurchases) = \$8 / (\$1 + \$3) = 2.0.

Dividend payout ratio = Dividends / Net Income = \$1 / \$10 = 0.1.

Question #42 of 45

Question ID: 462693

Which of the following would be *least likely* to prompt a decline in a company's overall payout ratio?

- ✓ **A) A permanent decrease in company profitability.**
- x B) A decrease in the capital gains tax rate.
- x C) An increase in interest rates.

Explanation

A permanent decrease in profits is expected to result in a decrease in the dividend payment level; however this would probably not lead to a decrease in the payout ratio. If interest rates were to increase, it would make retained earnings a more attractive way of financing new investment; as a result, the payout ratio would be more likely to decline. A decrease in the capital gains tax rate would (for investors that pay tax) make capital gains more appealing; accordingly, aggregate payout ratios would be expected to decline.

Question #43 of 45

Question ID: 462700

Which of the following dividend policies would a firm with long-term excess cash flows *most likely* use? A share repurchase

program:

- ☐ A) and a growing dividend model.
- ☐ B) and no payout of dividends.
- ☒ C) in conjunction with a residual dividend model.

Explanation

The residual dividend model allows firms to pay out dividends only if more earnings are available than are needed to support the optimal capital budget. Because dividend payouts can be unstable, a firm can supplement a low, stable dividend with a share repurchase program or with an extra dividend when times are good. Stock repurchases allow management to distribute cash without signaling information about future earnings. Abnormally good years could be followed with the purchase of shares, while selling shares would provide liquidity during temporary cash shortages.

Question #44 of 45

Question ID: 462709

The following information is from the 10-k of Laura's Chocolates, Inc.(LC), a maker of nut-based toffees.

Cash	25,000,000
Share price	40.00
Shares outstanding (prior to transaction)	20,000,000

LC decides to spend \$20 million repurchasing common stock. What is the value of a share of stock after the share repurchase?

- ☒ A) 40.00.
- ☐ B) 45.00.
- ☐ C) 35.00.

Explanation

$$\frac{20,000,000 \times 40 - 20,000,000}{20,000,000 - 500,000} = \frac{780,000,000}{19,500,000} = 40.00$$

Question #45 of 45

Question ID: 434350

Pearl City Breweries has 8 million shares outstanding that are currently trading at \$34 per share. The company is choosing whether to distribute \$22 million as dividends or to use the same amount to repurchase its shares. Ignoring tax effects, what will be the amount of total wealth from owning one share of Pearl City Breweries under each of these alternatives?

<u>Cash dividend</u>	<u>Share repurchase</u>
<input type="radio"/> A) \$31.25	\$37.00
<input checked="" type="radio"/> B) \$34.00	\$34.00

x C) \$31.25 \$34.00

Explanation

If the company pays a cash dividend, the dividend per share will be \$22 million/8 million = \$2.75. The value of its shares will be:

$$\frac{8,000,000(\$34) - \$22,000,000}{8,000,000} = \frac{\$250,000,000}{8,000,000} = \$31.25$$

So the total wealth from owning one share will be \$31.25 + \$2.75 = \$34.00.

If the company repurchases shares, it can buy \$22 million/\$34 = 647,058 shares. The value of one share would then be:

$$\frac{8,000,000(\$34) - \$22,000,000}{8,000,000 - 647,058} = \frac{\$250,000,000}{7,352,942} = \$34.00$$

If you remember that both a cash dividend and a share repurchase for cash leave shareholder wealth unchanged, this question does not require calculations of the amounts.