

SS 11 Corporate Finance: Leverage, Dividends and Share Repurchases, and Working Capital Management

Answers

Question #1 of 111

Question ID: 414866

The share price of Solar Automotive Industries is \$50 per share. It has a book value of \$500 million and 50 million shares outstanding. What is the book value per share (BVPS) after a share repurchase of \$10 million?

- X **A)** \$10.00.
- ✓ **B)** \$9.84.
- X **C)** \$10.12

Explanation

The share buyback is \$10 million / \$50 per share = 200,000 shares.

Remaining shares: 50 million – 200,000 = 49.8 million shares.

Solar Automotive Industries' current BVPS = \$500 million / 50 million = \$10.

Book value after repurchase: \$500 million – \$10 million = \$490 million.

BVPS = \$490 million / 49.8 million = \$9.84.

BVPS decreased by \$0.16.

Book value per share (BVPS) decreased because the share price is greater than the original BVPS. If the share prices were less than the original BVPS, then the BVPS after the repurchase would have increased.

References

Question From: Session 11 > Reading 38 > LOS e

Related Material:

- Key Concepts by LOS

Question #2 of 111

Question ID: 414882

In a recent staff meeting, David Hurley, stated that analysts should understand that financial ratios mean little by themselves. He advised his colleagues to evaluate financial ratios carefully. During the discussion he made the following statements:

Statement 1: A company can be compared with others in its industry by relating its financial ratios to industry norms. However, care must be taken because many ratios are industry-specific, but not all ratios are important to all industries.

Statement 2: Comparing a company to the overall economy is useless because overall business conditions are constantly changing. Specifically, it is not the case that financial ratios tend to improve when the economy is strong and weaken during recessionary times.

Are statements 1 and 2 as made by Hurley regarding financial ratio analysis CORRECT?

Statement 1 Statement 2

- | | |
|-----------------------|-----------|
| X A) Incorrect | Correct |
| X B) Correct | Correct |
| ✓ C) Correct | Incorrect |

Explanation

Financial ratios are meaningless by themselves. To have meaning an analyst must use them with other information. An analyst should evaluate financial ratios based on industry norms and economic conditions. Statement 1 is correct. However, statement 2 is not because financial ratios tend to improve when the economy is strong and weaken when the economy is in a recession. So, financial ratios should be reviewed in light of the current stage of the business cycle.

References

Question From: Session 11 > Reading 39 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #3 of 111

Question ID: 414877

Which of the following is NOT a limitation to financial ratio analysis?

- X **A)** Differences in international accounting practices.
- ✓ **B)** A firm that operates in only one industry.
- X **C)** The need to use judgment.

Explanation

If a firm operates in multiple industries, this would limit the value of financial ratio analysis by making it difficult to find comparable industry ratios.

References

Question From: Session 11 > Reading 39 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #4 of 111

Question ID: 434351

A share repurchase has what effect on shareholder wealth compared to a cash dividend of the same amount, if the tax treatment of the two alternatives is the same?

- ✓ **A)** Same effect.
- X **B)** Less effect.

X **C)** Greater effect.

Explanation

Assuming the tax treatment of the two alternatives is the same, a share repurchase has the same impact on shareholder wealth as a cash dividend payment of an equal amount. Because shares are repurchased using a company's own cash, a share repurchase can be considered an alternative to a cash dividend as a way of distributing earnings to shareholders.

References

Question From: Session 11 > Reading 38 > LOS f

Related Material:

- Key Concepts by LOS
-

Question #5 of 111

Question ID: 414850

Paying a cash dividend is *most likely* to result in:

- X **A)** an increase in liquidity ratios.
- ✓ **B)** an increase in financial leverage ratios.
- X **C)** the same impact on liquidity and leverage ratios as a stock dividend.

Explanation

A cash dividend will increase leverage ratios such as debt-to-equity and debt-to-assets, reflecting a decrease in the denominator. A cash dividend should decrease liquidity ratios such as the current ratio and cash ratio, due to the decrease in cash in the numerator. Unlike a cash dividend, a stock dividend or a stock split has no impact on liquidity or financial leverage ratios.

References

Question From: Session 11 > Reading 38 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #6 of 111

Question ID: 414832

A firm expects to produce 200,000 units of flour that can be sold for \$3.00 per bag. The variable costs per unit are \$2.00, the fixed costs are \$75,000, and interest expense is \$25,000. The degree of operating leverage (DOL) and the degree of total leverage (DTL) is *closest* to:

DOL

DTL

- | | |
|-----------------|-----|
| X A) 1.3 | 1.3 |
| X B) 1.6 | 1.3 |

✓ **C)** 1.6 2.0

Explanation

$$\text{DOL} = Q(P - V) / [Q(P - V) - F]$$

$$\text{DOL} = 200,000 (3 - 2) / [200,000(3 - 2) - 75,000] = 1.6$$

$$\text{DTL} = [Q(P - V) / Q(P - V) - F - I]$$

$$\text{DTL} = 200,000 (3 - 2) / [200,000 (3 - 2) - 75,000 - 25,000] = 2$$

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #7 of 111

Question ID: 434359

Which of the following forms of short-term financing is typically used to facilitate international trade?

- X **A)** Overdraft line of credit.
- ✓ **B)** Banker's acceptances.
- X **C)** Commercial paper.

Explanation

Banker's acceptances are used by firms that export goods. A banker's acceptance is a guarantee from the bank of the firm that has ordered the goods stating that a payment will be made upon receipt of the goods. The exporting company can then sell this acceptance at a discount in order to generate immediate funds.

References

Question From: Session 11 > Reading 39 > LOS g

Related Material:

- Key Concepts by LOS
-

Question #8 of 111

Question ID: 434352

Liquidating short-term assets and renegotiating debt agreements are *best* described as a firm's:

- ✓ **A)** secondary sources of liquidity.
- X **B)** pulls and drags on liquidity.
- X **C)** primary sources of liquidity.

Explanation

Secondary sources of liquidity include liquidating short-term or long-lived assets, negotiating debt agreements (i.e., renegotiating), or filing for bankruptcy and reorganizing the company. Primary sources of liquidity are the sources of cash a company uses in its normal operations. Pulls and drags on liquidity refer to factors that weaken a company's liquidity position.

References

Question From: Session 11 > Reading 39 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #9 of 111

Question ID: 414890

A firm records the following cash flows on the same day: \$250 million from debt proceeds; \$100 million funds transferred to a subsidiary; \$125 million in interest payments; and \$30 million in tax payments. The net daily cash position:

- ☒ **A)** worsened.
- ☐ **B)** remained the same.
- ☐ **C)** improved.

Explanation

Improving a firm's net daily requires more inflows than outflows. Debt proceeds are cash inflows while funds transferred to a subsidiary, interest and dividend payments, and tax payments are outflows. The net cash change for the day is $\$250 - \$100 - \$125 - \$30 = -\$5$ million.

References

Question From: Session 11 > Reading 39 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #10 of 111

Question ID: 414891

Which yield measure is the *most* appropriate for comparing a company's investments in short-term securities?

- ☐ **A)** Money market yield.
- ☒ **B)** Bond equivalent yield.
- ☐ **C)** Discount basis yield.

Explanation

When evaluating the performance of its short-term securities investments, a company should compare them on a bond equivalent yield basis.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #11 of 111

Question ID: 414856

Shareholders selling shares between the ex-dividend date and date of record:

- ✓ **A)** receive the dividend.
- X **B)** forfeit the dividend, with the proceeds staying with the company.
- X **C)** forfeit the dividend, with the proceeds going to the buyer.

Explanation

The date of record is the date on which the shareholders of record are designated to receive the dividend. The ex-dividend date is the cut-off date for receiving the dividend. Shares sold after the ex-dividend date are sold without claim to the dividend, even if they are sold prior to the date of record. The dividend would be paid to the holder as of the close of trading on the day prior to the ex-dividend date.

References

Question From: Session 11 > Reading 38 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #12 of 111

Question ID: 460669

In reviewing the effectiveness of a company's working capital management, an analyst has calculated operating cycle and cash conversion cycle measures for the past three years.

	<u>20X6</u>	<u>20X7</u>	<u>20X8</u>
Operating cycle (number of days)	55	60	62
Cash conversion cycle (number of days)	27	30	32

The trends in the operating cycle and cash conversion cycle *most likely* indicate:

- ✓ **A)** slower collections of receivables.
- X **B)** improving liquidity.
- X **C)** stretching of payables.

Explanation

Longer operating and cash conversion cycles are frequently signs of liquidity problems. Slower collections or inventory turnover lengthen the operating cycle. The cash conversion cycle is also growing longer, which suggests the company is not stretching payables to offset the lengthening operating cycle.

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #13 of 111

Question ID: 414836

Which of the following *best* describes a firm with low operating leverage? A large change in:

- ☐ A) earnings before interest and taxes result in a small change in net income.
- ☒ B) the number of units a firm produces and sells result in a similar change in the firm's earnings before interest and taxes.
- ☐ C) sales result in a small change in net income.

Explanation

Operating leverage is the result of a greater proportion of fixed costs compared to variable costs in a firm's capital structure and is characterized by the sensitivity in operating income (earnings before interest and taxes) to change in sales. A firm that has equal changes in sales and operating income would have low operating leverage (the least it can be is one). Note that the relationship between operating income and net income is impacted by the degree of financial leverage, and the relationship between sales and net income is impacted by the degree of total leverage.

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #14 of 111

Question ID: 414853

Financial managers utilize stock splits and stock dividends because they perceive that:

- ☒ A) an optimal trading range exists.
- ☐ B) brokerage fees paid by shareholders will be reduced.
- ☐ C) investors will double the share price if there is a 20% stock dividend.

Explanation

Although there is little empirical evidence to support the contention, there is nevertheless a widespread belief in financial circles

that an optimal price range exists for stocks. "Optimal" means that if the price is within this range, the price/earnings ratio, price/sales and other relevant ratios will be maximized. Hence, the value of the firm will be maximized.

References

Question From: Session 11 > Reading 38 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #15 of 111

Question ID: 414840

Which of the following is a key determinant of operating leverage?

- ☒ **A)** The tradeoff between fixed and variable costs.
- ☐ **B)** Level and cost of debt.
- ☐ **C)** The competitive nature of the business.

Explanation

Operating leverage can be defined as the trade off between variable and fixed costs.

References

Question From: Session 11 > Reading 37 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #16 of 111

Question ID: 414906

Which of the following sources of liquidity is the *most* reliable?

- ☐ **A)** Committed line of credit.
- ☐ **B)** Uncommitted line of credit.
- ☒ **C)** Revolving line of credit.

Explanation

A revolving line of credit is typically for a longer term than an uncommitted or committed line of credit and thus is considered a more reliable source of liquidity. With an uncommitted line of credit, the issuing bank may refuse to lend if conditions of the firm change. An overdraft line of credit is similar to a committed line of credit agreement between banks and firms outside of the U.S. Both committed and revolving lines of credit can be verified and can be listed in the footnotes to a firm's financial statements as sources of liquidity.

References

Question From: Session 11 > Reading 39 > LOS g

Related Material:

- Key Concepts by LOS
-

Question #17 of 111

Question ID: 487760

Armsware Industries' board is debating whether to issue a cash dividend or a stock dividend. Director Jones states, "We should issue a cash dividend because our liquidity ratios will improve and the credit rating agencies will love it." Director Beane states, "A stock dividend will improve our leverage ratios by increasing contributed capital, which is what the rating agencies are looking for." Are the statements by Jones and Beane accurate?

<u>Jones</u>	<u>Beane</u>
X A) Yes	No
X B) Yes	Yes
✓ C) No	No

Explanation

Neither statement is accurate. Cash dividends will decrease both assets and equity, causing liquidity ratios to decline (assets fall, while liabilities stay the same). Stock dividends do not affect the firm's leverage ratios. Total equity remains unchanged because a stock dividend neither raises capital nor distributes earnings to shareholders.

References

Question From: Session 11 > Reading 38 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #18 of 111

Question ID: 414886

An analyst who is evaluating a firm's working capital management would be *least likely* to be concerned if the firm's:

- X **A)** number of days of inventory is higher than that of its peers.
- ✓ **B)** operating cycle is shorter than that of its peers.
- X **C)** total asset turnover is lower than its industry average.

Explanation

A shorter operating cycle will lead to a shorter cash conversion cycle, other things equal, which is an indication of better working capital management. Higher days inventory on hand, compared to peer company averages, will lengthen the cash conversion cycle, an indication of poorer working capital management. Good working capital management would tend to increase a firm's

total asset turnover since a given amount of sales can be supported with less working capital (less current assets).

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #19 of 111

Question ID: 414876

An analyst computes the following ratios for Iridescent Carpeting Inc. and compares the results to the industry averages:

<i>Financial Ratio</i>	<i>Iridescent Carpeting</i>	<i>Industry Average</i>
Current Ratio	2.3x	1.8x
Net Profit Margin	22%	24%
Return on Equity	17%	20%
Total Debt / Total Capital	35%	56%
Times Interest Earned	4.7x	4.1x

Based on the above data, which of the following can the analyst conclude? Iridescent Carpeting:

- X **A)** is most likely a younger company than its competitors.
- X **B)** has stronger profitability than its competitors.
- ✓ **C)** has better short-term liquidity than its competitors.

Explanation

Based on the data provided, the analyst can conclude that Iridescent Carpeting has weaker profitability than its competitors based on the net profit margin and return on equity. The analyst can also conclude that the company has less financial leverage (risk) than the industry average based on the total debt / total capital and the times interest earned ratios. The analyst can conclude that the company has better short-term liquidity than the industry average (i.e., its competitors) based on the current ratio.

References

Question From: Session 11 > Reading 39 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #20 of 111

Question ID: 414889

Which of the following factors is *most likely* to cause a firm to need short-term financing?

- X **A)** Shorter cash conversion cycle than the industry average.
- ✓ **B)** Operating cash inflows that fluctuate seasonally.
- X **C)** Return of principal from maturing investments.

Explanation

Firms with operating cash inflows that fluctuate seasonally are likely to experience short-term imbalances between cash inflows and cash outflows and must forecast these imbalances to manage their net daily cash positions, for example by arranging short-term borrowing over seasons when operating cash inflows are expected to be relatively low and operating cash outflows are relatively high.

References

Question From: Session 11 > Reading 39 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #21 of 111

Question ID: 414904

Which of the following sources of credit would an analyst *most likely* associate with a borrower of the lowest credit quality?

- X **A)** Committed line of credit.
- ✓ **B)** Uncommitted line of credit.
- X **C)** Revolving line of credit.

Explanation

Committed lines and revolving lines of credit all contain a commitment by a lender to lend up to a maximum amount, at the borrower's option for some period of time. A firm with lower credit quality may have an uncommitted line of credit which offers no guarantee from the lender to provide any specific amount of funds in the future.

References

Question From: Session 11 > Reading 39 > LOS g

Related Material:

- Key Concepts by LOS
-

Question #22 of 111

Question ID: 434349

Sinclair Construction Company's Board of Directors is considering repurchasing \$30,000,000 worth of common stock. Sinclair assumes that the stock can be repurchased at the market price of \$50 per share. After much discussion Sinclair decides to borrow \$30 million that it will use to repurchase shares. Sinclair's Chief Executive Officer (CEO) has compiled the following information regarding the repurchase of the firm's common stock:

- Share price at the time of buyback = \$50
- Shares outstanding before buyback = 30,600,000
- EPS before buyback = \$3.33
- Earnings yield = $\$3.33 / \$50 = 6.7\%$
- After-tax cost of borrowing = 8.0%
- Planned buyback = 600,000 shares

Based on the information above, Sinclair's earnings per share (EPS) after the repurchase of its common stock will be *closest* to:

- ✓ **A) \$3.32.**
- X **B) \$3.23.**
- X **C) \$3.18.**

Explanation

Total earnings = $\$3.33 \times 30,600,000 = \$101,898,000$

$$\begin{aligned}
 \text{EPS after buyback} &= \frac{\text{total earnings} - \text{after-tax cost of funds}}{\text{shares outstanding after buyback}} \\
 &= \frac{\$101,898,000 - (600,000 \text{ shares} \times \$50 \times 0.08)}{(30,600,000 - 600,000) \text{ shares}} \\
 &= \frac{\$101,898,000 - \$2,400,000}{30,000,000 \text{ shares}} \\
 &= \frac{\$99,498,000}{30,000,000 \text{ shares}} \\
 &= \$3.32
 \end{aligned}$$

Since the 8.0% after-tax cost of borrowing is greater than the 6.7% earnings yield (E/P) of the shares, the share repurchase reduces Sinclair's EPS.

References

Question From: Session 11 > Reading 38 > LOS d

Related Material:

- Key Concepts by LOS

Question #23 of 111

Question ID: 414843

Jayco, Inc. has a division that makes red ink for the accounting industry. The unit has fixed costs of \$10,000 per month, and is expected to sell 40,000 bottles of ink per month. If the variable cost per bottle is \$2.00 what price must the division charge in order to breakeven?

- X **A) \$2.75.**
- ✓ **B) \$2.25.**

X C) \$2.50.

Explanation

$$40,000 = \$10,000 / (P - \$2)$$

$$40,000P - \$80,000 = \$10,000$$

$$P = \$90,000 / 40,000 = \$2.25.$$

References

Question From: Session 11 > Reading 37 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #24 of 111

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?

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

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.

References

Question From: Session 11 > Reading 38 > LOS f

Related Material:

- Key Concepts by LOS
-

Question #25 of 111

Question ID: 485792

A company has just received a \$5 million shipment from a supplier. Its terms of trade credit are 2/15 net 30. It has access to a line of credit with an annualized cost of 9%. The *best* short-term financing strategy is to pay the invoice:

- X A) immediately.
- X B) on day 30.

✓ **C)** on day 15.

Explanation

The firm receives free short-term financing through day 15. It should pay with cash (or use the line of credit with an annualized cost of 9%) on day 15 to take advantage of the trade discount. Paying immediately is not the best answer because the firm incurs either a financing charge with the line of credit or lost interest on its funds if paid immediately with cash. The cost of foregoing the trade discount and paying on day 30 is $\{[1 + (0.02/0.98)]^{365/(30 - 15)}\} - 1 = 63.49\%$. This cost is much greater than the alternatives.

References

Question From: Session 11 > Reading 39 > LOS f

Related Material:

- Key Concepts by LOS
-

Question #26 of 111

Question ID: 414852

Stock splits:

- X **A)** increase firm value.
- X **B)** are less common than stock dividends.
- ✓ **C)** do not in and of themselves affect firm value.

Explanation

Stock splits divide up each existing share into multiple shares. The price of each share will drop correspondingly to the number of shares created, so there is no change in the owner's wealth. Empirical research has shown that in the absence of a dividend yield increase, the stock price falls to the stock split ratio of the original price (i.e., to 25% of the original price in a 4-for-1 stock split). This makes sense, given that the investor's percentage ownership of the company has not changed.

References

Question From: Session 11 > Reading 38 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #27 of 111

Question ID: 414901

A result that is *most likely* to give a financial manager concern that his firm's credit policy may have become too lenient is:

- ✓ **A)** weighted average collection period has increased.
- X **B)** receivables turnover has increased significantly.
- X **C)** inventory turnover has decreased considerably.

Explanation

The weighted average collection period is the average number of days it takes to collect a dollar of receivables. A decreased percentage of sales made on credit or an increase in the receivables turnover ratio might result from more strict credit terms. Inventory turnover is not directly affected by credit terms, only through the effect of credit terms on overall sales.

References

Question From: Session 11 > Reading 39 > LOS f

Related Material:

- Key Concepts by LOS
-

Question #28 of 111

Question ID: 460672

An analyst is reviewing the working capital portfolio investment policy of a publicly traded firm. Which of the following components of the policy is the analyst *least likely* to find acceptable?

- X **A)** Authority for selecting and managing short-term investments rests with the firm's treasurer and any designees selected by the treasurer.
- X **B)** Investments must have an A-1 rating from S&P or an equivalent rating from another agency.
- ✓ **C)** Investments in U.S. T-bills, commercial paper, and bank CDs are acceptable unless issued by Stratford Bank.

Explanation

An investment policy for short-term portfolios should have the following elements: purpose, authorities, limitations/restrictions, quality, and other items. The purpose section should state the general reason the portfolio exists and the general strategy that will be followed. The limitations section generally states the types of investments that are or are not acceptable and should note only categories of securities rather than specific issuers of securities. The authorities section should state the executives who will oversee the portfolio. The quality section should state guidelines for the credit quality of the investments in the portfolio. The "other" section may be used for portfolio requirements not covered in the first four sections, such as auditing or reporting requirements.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #29 of 111

Question ID: 434358

Pfluger Company's accounts payable department receives an invoice from a vendor with terms of 2/10 net 30. If Pfluger pays the invoice on its due date, the cost of trade credit is *closest* to:

- X A) 43.5%.
- X B) 27.9%.
- ✓ C) 44.6%.

Explanation

"2/10 net 30" is a discount of 2% of the invoice amount for payment within 10 days, with full payment due in 30 days. Cost of trade credit on day 30 =

$$\left(1 + \frac{0.02}{1 - 0.02}\right)^{\frac{365}{30-10}} - 1 = 44.6\%.$$

References

Question From: Session 11 > Reading 39 > LOS f

Related Material:

- Key Concepts by LOS
-

Question #30 of 111

Question ID: 414858

Which justification for repurchasing stock is the *least* valid?

- X A) A cash dividend increase, in response to short-term excess cash flows, may confuse investors.
- X B) Repurchases offer shareholders more choices than cash dividends.
- ✓ C) Shareholders prefer capital gains to cash dividends.

Explanation

Some shareholders prefer capital gains, while others prefer dividends. Repurchases offer shareholders the choice of tendering or not tendering their stock, while cash dividends represent a payment they cannot refuse. Raising dividends is often seen as a positive signal, but an increase funded by short-term cash flows may not be sustainable, forcing the company to reduce the dividend later.

References

Question From: Session 11 > Reading 38 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #31 of 111

Question ID: 434344

Which type of cash dividend is *most likely* to be declared by a cyclical firm during good times?

- X A) Stock dividend.

X **B)** Liquidating dividend.

✓ **C)** Special dividend.

Explanation

Special dividends are used when favorable circumstances allow the firm to make a one-time cash payment to shareholders, in addition to any regular dividends the firm pays. Many cyclical firms (e.g., automakers) will use a special dividend to share profits with shareholders when times are good but maintain the flexibility to conserve cash when profits are down. Other names for special dividends include extra dividends and irregular dividends.

Liquidating dividends occur when a company ceases to operate and distributes any equity proceeds to shareholders. Stock dividends are paid out in shares of stock rather than cash and are similar to stock splits.

References

Question From: Session 11 > Reading 38 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #32 of 111

Question ID: 485789

Myron Jackson is a private equity fund manager specializing in distressed companies. His investment philosophy is based on the principle that capital structure problems can be fixed, but industry characteristics dictate business models. Jackson would *most likely* be interested in distressed firms with which of the following characteristics?

X **A)** High operating risk and high financial risk.

✓ **B)** High financial risk and low operating risk.

X **C)** High operating risk and low financial risk.

Explanation

Financial risk refers to the capital structure, while operating risk refers to the operating cost structure. A firm's capital structure is well within the control of management as to how much debt to assume. In contrast, a firm's operating cost structure is usually driven by industry characteristics. This distressed firm's specialist would be looking for firms with capital structure problems that can be solved with an increase in equity capital and a reduction in debt financing. Changing the operating characteristics of the industry is far more challenging.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #33 of 111

Question ID: 414849

Steven's Bakery produces snack cakes and bread. Listed below are the operating costs for the snack cakes division and the bread division.

	Snack cakes	Bread
Price per package	\$2.00	\$2.50
Variable cost per package	\$1.00	\$1.30
Fixed operating costs	\$25,000	\$30,000
Fixed financing costs	\$10,000	\$10,000

Compared to the snack cakes division, the operating breakeven quantity for the bread division is:

- ☐ A) greater.
- ☒ B) the same.
- ☐ C) less.

Explanation

The operating breakeven quantity for the snack cakes division is $\$25,000 / (\$2.00 - \$1.00) = 25,000$.

The operating breakeven quantity for the bread division is $\$30,000 / (\$2.50 - \$1.30) = 25,000$.

References

Question From: Session 11 > Reading 37 > LOS e

Related Material:

- Key Concepts by LOS

Question #34 of 111

Question ID: 414895

Assume that a 30-day commercial paper security has a holding period yield of 0.80%. The bond equivalent yield of this security is:

- ☐ A) 9.60%.
- ☐ B) 10.12%.
- ☒ C) 9.73%.

Explanation

$$\text{BEY} = \text{HPY} \times (365/\text{days})$$

$$\text{BEY} = 0.80\% \times (365/30) = 9.73\%$$

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #35 of 111

Question ID: 414831

Which of the following statements regarding leverage is *most* accurate?

- X **A)** High levels of financial leverage increase business risk while high levels of operating leverage will decrease business risk.
- ✓ **B)** A firm with low operating leverage has a small proportion of its total costs in fixed costs.
- X **C)** A firm with high business risk is more likely to increase its use of financial leverage than a firm with low business risk.

Explanation

A firm with high operating leverage has a high percentage of its total costs in fixed costs.

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #36 of 111

Question ID: 414838

Additional debt should be used in the firm's capital structure if it increases:

- X **A)** firm earnings.
- X **B)** earnings per share.
- ✓ **C)** the value of the firm.

Explanation

The key to finding the optimal capital structure is identifying the level of debt that will maximize firm value. Earnings and earnings per share are not critical in and of themselves when assessing firm value, because they do not consider risk.

References

Question From: Session 11 > Reading 37 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #37 of 111

Question ID: 436851

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

- ☐ A) A stock repurchase occurs when a large block of stock is removed from the marketplace.
- ☐ B) Management can distribute cash to shareholders at a favorable after-tax rate.
- ☒ 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.

References

Question From: Session 11 > Reading 38 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #38 of 111

Question ID: 414861

Which of the following is *least likely* a method by which firms repurchase their shares?

- ☒ A) Exercise a call provision.
- ☐ B) Direct negotiation.
- ☐ C) Tender offer.

Explanation

Call provisions are not relevant to common stock and are not considered a repurchase in any case. There are three repurchase methods. The first is to buy in the open market. A company may repurchase stock by making a *tender offer* to repurchase a specific number of shares at a price that is usually at a premium to the current market price. The third way is to repurchase by direct negotiation. Companies may negotiate directly with a large shareholder to buy back a block of shares, usually at a premium to the market price.

References

Question From: Session 11 > Reading 38 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #39 of 111

Question ID: 414851

A periodic payment to shareholders in the form of additional shares of stock instead of cash is a:

- X **A)** dividend reinvestment plan
- X **B)** stock repurchase
- ✓ **C)** stock dividend

Explanation

Stock dividends are dividends paid out in new shares of stock instead of cash. Unlike stock dividends, dividend reinvestment plans are at the discretion of individual shareholders. In the case of stock repurchases, the company is buying back shares so the number of shares in the investment public's hands is declining.

References

Question From: Session 11 > Reading 38 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #40 of 111

Question ID: 414903

A large, creditworthy manufacturing firm would *most likely* get short-term financing by:

- X **A)** factoring its receivables.
- X **B)** entering into an agreement for a committed line of credit.
- ✓ **C)** issuing commercial paper.

Explanation

Large, creditworthy firms can get the lowest cost of financing by issuing commercial paper. Selling receivables to a factor is a higher cost source of funds used by firms with poor credit quality. A committed line of credit requires payment of a fee and represents bank borrowing, which would be attractive to a firm that did not have the size or creditworthiness to issue commercial paper.

References

Question From: Session 11 > Reading 39 > LOS g

Related Material:

- Key Concepts by LOS
-

Question #41 of 111

Question ID: 434356

A high cash conversion cycle suggests that a company's investment in working capital is:

- ✓ **A)** too high.
- X **B)** too low.
- X **C)** appropriate.

Explanation

The cash conversion cycle is equal to average days of receivables plus average days of inventory minus average days of payables. High cash conversion cycles relative to those of comparable firms are considered undesirable. A cash conversion cycle that is too high implies that the company has excessive investment in working capital.

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #42 of 111

Question ID: 414847

Yangtze Delta High Technology produces multimedia-enabled wireless phones. The factory incurs rent, depreciation, salary, and other fixed costs totaling RMB 10 million per year. Also, the company incurs annual interest of RMB 3 million on debt. Each phone sold by Yangtze Delta sells for RMB 200. The variable cost per phone is RMB 150. Yangtze Delta's operating breakeven quantity of sales is *closest to*:

- X **A)** 260,000.
- ✓ **B)** 200,000.
- X **C)** 65,000.

Explanation

The operating breakeven point is the quantity of product sold at which operating income is zero (revenue equals operating cost).

F = Fixed operating cost = RMB 10,000,000

P = Price per unit = RMB 200

V = Variable cost per unit = RMB 150

Operating breakeven quantity = $F / (P - V) = 10,000,000 / (200 - 150) = 200,000$.

References

Question From: Session 11 > Reading 37 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #43 of 111

Question ID: 414873

An example of a secondary source of liquidity is:

- ☐ A) trade credit and bank lines of credit.
- ☒ B) negotiating debt contracts.
- ☐ C) cash flow management.

Explanation

Secondary sources of liquidity include negotiating debt contracts, liquidating assets, and filing for bankruptcy protection and reorganization. Primary sources of liquidity include ready cash balances, short-term funds (e.g., trade credit and bank lines of credit), and cash flow management.

References

Question From: Session 11 > Reading 39 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #44 of 111

Question ID: 414899

Which of the following strategies is *most likely* to be considered good payables management?

- ☐ A) Paying trade invoices on the day they arrive.
- ☒ B) Paying invoices on the last possible day to still get the supplier's discount for early payment.
- ☐ C) Taking trade discounts only if the firm's annual return on short-term investments is less than the discount percentage.

Explanation

Paying invoices on the last day to get a discount (for early payment) is often the most advantageous strategy for a firm. If the annualized percentage cost of not taking advantage of the discount is less than the firm's short-term cost of funds, it would be advantageous to pay on the due date. However, the discount percentage is not an annualized rate, so it cannot be compared directly to the firm's *annual* return on short-term investments. Paying prior to the discount cut-off date or prior to the due date sacrifices interest income for no advantage.

References

Question From: Session 11 > Reading 39 > LOS f

Related Material:

- Key Concepts by LOS
-

Question #45 of 111

Question ID: 414835

Jayco, Inc. sells 10,000 units at a price of \$5 per unit. Jayco's fixed costs are \$8,000, interest expense is \$2,000, variable costs

are \$3 per unit, and earnings before interest and taxes (EBIT) is \$12,000. What is Jayco's degree of financial leverage (DFL) and total leverage (DTL)?

	<u>DFL</u>	<u>DTL</u>
X A)	1.33	1.75
✓ B)	1.20	2.00
X C)	1.33	2.00

Explanation

$$\text{DOL} = [Q(P - V)] / [Q(P - V) - F] = [10,000(5 - 3)] / [10,000(5 - 3) - 8,000] = 1.67$$

$$\text{DFL} = \text{EBIT} / (\text{EBIT} - I) = 12,000 / (12,000 - 2,000) = 1.2$$

$$\text{DTL} = \text{DOL} \times \text{DFL} = 1.67 \times 1.2 = 2.0$$

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS

Question #46 of 111

Question ID: 414830

Given the following information on the annual operating results for ArtFrames, a producer of quality metal picture frames, what is the degree of operating leverage (DOL) and the degree of financial leverage (DFL)?

- Sales of \$3.5 million
- Variable Costs at 45% of sales
- Fixed Costs of \$1.05 million
- Debt interest payments on \$750,000 issued at par with an annual 9.0% coupon (current yield is 7.0%)

Which of the following choices is *closest* to the correct answer? ArtFrame's DOL and DFL are:

	<u>DOL</u>	<u>DFL</u>
X A)	3.00	1.50
X B)	2.20	1.50
✓ C)	2.20	1.08

Explanation

The calculations are as follows:

First, calculate the operating results:

<i>ArtFrames Annual Operating Results</i>	
Sales	\$3,500,000
Variable Costs ¹	<u>1,575,000</u>
	1,925,000
Fixed Costs	<u>1,050,000</u>
Earnings before interest and taxes (EBIT)	<u>875,000</u>
Interest Expense ²	<u>67,500</u>
	807,500
¹ Variable costs = 0.45 × 3,500,000	
² Interest Expense = 0.09 × 750,000	

Second, calculate DOL:

$$\begin{aligned} \text{DOL} &= (\text{Sales} - \text{Variable Costs}) / (\text{Sales} - \text{Variable Costs} - \text{Fixed Costs}) \\ &= (3,500,000 - 1,575,000) / (3,500,000 - 1,575,000 - 1,050,000) = 2.20 \end{aligned}$$

Third, calculate DFL:

$$\text{DFL} = \text{EBIT} / (\text{EBIT} - I) = 875,000 / 807,500 = 1.08$$

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS

Question #47 of 111

Question ID: 414845

Annual fixed costs at King Mattress amount to \$325,000. The variable cost of raw materials and labor is \$120 for the typical mattress. Sales prices for mattresses average \$160. How many units must King Mattress sell to break even?

- ✓ **A)** 8,125.
- X **B)** 2,708.
- X **C)** 40.

Explanation

$$Q_{\text{Breakeven}} = \text{Fixed Cost} / (\text{Price} - \text{Variable Cost})$$

$$Q_{\text{Breakeven}} = \$325,000 / (160 - 120) = 8,125$$

References

Question From: Session 11 > Reading 37 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #48 of 111

Question ID: 414815

All else equal, a firm's business risk is higher when:

- X **A)** variable costs are the highest portion of its expense.
- X **B)** the firm has low operating leverage.
- ✓ **C)** fixed costs are the highest portion of its expense.

Explanation

The higher the percentage of a firm's costs that are fixed, the higher the operating leverage, and the greater the firm's business risk and the more susceptible it is to business cycle fluctuations.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #49 of 111

Question ID: 414841

Which of the following statements regarding the impact of financial leverage on a company's net income and return on equity (ROE) is *most* accurate?

- X **A)** If a firm has a positive operating profit margin, using financial leverage will always increase ROE.
- ✓ **B)** Using financial leverage increases the volatility of ROE for a level of volatility in operating income.
- X **C)** Increasing financial leverage increases both risk and potential return of existing bondholders.

Explanation

If a firm is financed with 100% equity, there is a direct relationship between changes in the firm's ROE and changes in operating income. Adding financial leverage (debt) to the firm's capital structure will cause ROE to become much more volatile and ROE will change more rapidly for a given change in operating income. The increased volatility in ROE reflects an increase in both risk and potential return for equity holders. Note that financial leverage results in increased default risk, but since existing bond holders are compensated by coupon interest and return of principal, their potential return is unchanged. Although financial leverage will generally increase ROE if a firm has a positive operating margin (EBIT/Sales), if the operating margin were small, the added interest expense could turn the firm's net profit margin negative, which would in turn make ROE negative.

References

Question From: Session 11 > Reading 37 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #50 of 111

Question ID: 414894

An investment policy statement for a firm's short-term cash management function would *least* appropriately include:

- ✓ **A)** a list of permissible securities.
- X **B)** procedures to follow if the investment guidelines are violated.
- X **C)** information on who is allowed to invest corporate cash.

Explanation

An investment policy statement typically begins with a statement of the purpose and objective of the investment portfolio, some general guidelines about the strategy to be employed to achieve those objectives, and the types of securities that will be used. A list of permitted securities for investment would be limited and likely too restrictive. A list of permitted security types is appropriate and can provide the necessary flexibility to increase yield within the safety and liquidity constraints appropriate for the firm.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #51 of 111

Question ID: 460670

Robel Company, which pays no dividends, carries out a 3-for-5 reverse split of its common shares. How will this transaction affect Robel's forecasts of its net cash position?

- ✓ **A)** No effect because this transaction does not affect future cash flows.
- X **B)** No effect on the short-term forecast but less net cash in the longterm forecast.
- X **C)** More net cash in both the short-term forecast and the long-term forecast.

Explanation

Stock splits and reverse stock splits do not affect a firm's future cash flows unless dividend yields are increased as a result. These transactions change the number of shares outstanding but they do not raise capital for the firm.

References

Question From: Session 11 > Reading 39 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #52 of 111

Question ID: 414855

The cut-off date for receiving the dividend is known as the:

- ☐ A) date of payment.
- ☐ B) holder of record date.
- ☒ C) ex-dividend date.

Explanation

The cut-off date for receiving the dividend is known as the ex-dividend date. The holder of record date is the date on which the shareholders of record are designated. The date the checks are mailed out is known as the date of payment.

References

Question From: Session 11 > Reading 38 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #53 of 111

Question ID: 414816

Which of the following statements about business risk and financial risk is *least* accurate?

- ☐ A) Business risk is the riskiness of the company's assets if it uses no debt.
- ☒ B) The greater a company's business risk, the higher its optimal debt ratio.
- ☐ C) Factors that affect business risk are demand, sales price, and input price variability.

Explanation

The greater a company's business risk, the *lower* its optimal debt ratio.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #54 of 111

Question ID: 414867

The share prices of Solar Automotive Industries and Winnipeg Auto Unlimited are both \$50 per share, and each company has 50 million shares outstanding. On September 30, both companies announced a \$10 million stock buyback. Solar has a book value

of \$500 million, while Winnipeg has a book value of \$900 million. How much did the book value per share (BVPS) of each company increase or decrease after the share repurchase?

Solar Automotive Industries Winnipeg Auto Unlimited

- | | |
|-------------------------|--------------------|
| X A) Decrease by \$0.13 | Decrease by \$0.13 |
| X B) Increase by \$0.13 | Increase by \$0.16 |
| ✓ C) Decrease by \$0.16 | Decrease by \$0.13 |

Explanation

The share buyback for each company is \$10 million / \$50 per share = 200,000 shares.
Remaining shares for each company = 50 million – 200,000 = 49.8 million shares.

For Solar Automotive Industries:

Solar Automotive Industries' current BVPS = \$500 million / 50 million = \$10.
The market price per share of \$50 is greater than the BVPS of \$10.
Book value after repurchase = \$500 million - \$10 million = \$490 million
BVPS = \$490 million / 49.8 million = \$9.84
BVPS decreased by \$0.16

For Winnipeg Auto Unlimited:

Winnipeg Auto Unlimited's current BVPS = \$900 million / 50 million = \$18.
The market price per share of \$50 is greater than the BVPS of \$18.
Book value after repurchase = \$900 million - \$10 million = \$890 million
BVPS = \$890 million / 49.8 million = \$17.87
BVPS decreased by \$0.13.

In the case of both Solar Automotive Industries and Winnipeg Auto Unlimited, book value per share (BVPS) decreased because the share price is greater than the original BVPS. If the share prices were less than the original BVPS, then the BVPS after the repurchase for each firm would have increased.

References

Question From: Session 11 > Reading 38 > LOS e

Related Material:

- Key Concepts by LOS

Question #55 of 111

Question ID: 414817

Variability in a firm's operating income is *most closely* related to its:

- ✓ **A)** business risk.
- X **B)** internal risk.
- X **C)** financial risk.

Explanation

Business risk is the uncertainty regarding the operating income of a company. Financial risk refers to the uncertainty caused by the fixed cost associated with borrowed money.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #56 of 111

Question ID: 414897

A firm is choosing among three short-term investment securities:

Security 1: A 30-day U.S. Treasury bill with a discount yield of 3.6%.

Security 2: A 30-day banker's acceptance selling at 99.65% of face value.

Security 3: A 30-day time deposit with a bond equivalent yield of 3.65%.

Based only on these securities' yields, the firm would:

- X **A)** prefer the U.S. Treasury bill.
- X **B)** prefer the time deposit.
- ✓ **C)** prefer the banker's acceptance.

Explanation

We can compare the yields of these securities on any single basis. The preferred basis is the bond equivalent yield.

Security 1 = discount is $3.6\%(30 / 360) = 0.3\%$

BEY = $(0.3 / 99.7) (365 / 30) = 3.661\%$

BEY of Security 2 = $(0.35 / 99.65) \times (365 / 30) = 4.273\%$

BEY of Security 3 = 3.65%

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #57 of 111

Question ID: 434355

The average number of days that it takes to turn raw materials into cash proceeds is a firm's:

- ☐ A) receivables cycle.
- ☐ B) inventory turnover cycle.
- ☒ C) operating cycle.

Explanation

Operating cycle = days of inventory + days of receivables, and is the number of days that it takes to turn raw materials into cash from sales.

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #58 of 111

Question ID: 414881

Which of the following is *least likely* an indicator of a firm's liquidity?

- ☐ A) Cash as a percentage of sales.
- ☐ B) Inventory turnover.
- ☒ C) Amount of credit sales.

Explanation

No inferences about liquidity are warranted based on this measure. A firm may have higher credit sales than another simply because it has more sales overall. Cash as a proportion of sales and inventory turnover are indicators of liquidity.

References

Question From: Session 11 > Reading 39 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #59 of 111

Question ID: 434354

Which of the following *most* accurately represents the cash conversion cycle?

- ☐ A) average days of payables + average days of inventory - average days of receivables.
- ☒ B) average days of receivables + average days of inventory - average days of payables.

X **C)** average days of receivables + average days of inventory + average days of payables.

Explanation

The cash conversion cycle, also called the net operating cycle is:

$$\text{cash conversion cycle} = \left(\text{average days of receivables} \right) + \left(\text{average days of inventory} \right) - \left(\text{average days of payables} \right)$$

The cash conversion cycle measures the length of time required to convert a firm's cash investment in inventory back into cash resulting from the sale of the inventory. A short cash conversion cycle is good because it indicates a relatively low investment in working capital.

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #60 of 111

Question ID: 414822

The uncertainty in return on assets due to the nature of a firm's operations is known as:

- X **A)** tax efficiency.
- X **B)** financial leverage.
- ✓ **C)** business risk.

Explanation

Business risk is a function of the firm's revenue and expenses, resulting in operating income, or earnings before interest and taxes (EBIT). The main factors affecting business risk are demand variability, sales price variability, input price variability, ability to adjust output prices, and operating leverage. Tax efficiency is tied to mutual fund investing, while financial leverage requires the existence of debt.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #61 of 111

Question ID: 414819

Hughes Continental is assessing its business risk. Which of the following factors would *least likely* be considered in the analysis?

- ✓ **A)** Debt-equity ratio.

X **B)** Input price variability.

X **C)** Unit sales levels.

Explanation

The main factors affecting business risk are demand variability, sales price variability, input price variability, ability to adjust output prices, and operating leverage. Debt levels affect financial risk, not business (operating) risk.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #62 of 111

Question ID: 414868

The share price of Winnipeg Auto Unlimited is \$5 per share. There are 50 million shares outstanding, and Winnipeg has a book value of \$900 million. What is the book value per share (BVPS) after the share repurchase of \$10 million?

✓ **A)** \$18.54.

X **B)** \$21.24.

X **C)** \$14.76.

Explanation

The share buyback is \$10 million / \$5 per share = 2,000,000 shares.

Remaining shares: 50 million – 2 million = 48 million shares.

Winnipeg Auto Unlimited's current BVPS = \$900 million / 50 million = \$18.

Book value after repurchase: \$900 million – \$10 million = \$890 million.

BVPS = \$890 million / 48.0 million = \$18.54.

BVPS increased by \$0.54.

Book value per share (BVPS) increased because the share price is less than the original BVPS. If the share prices were more than the original BVPS, then the BVPS after the repurchase would have decreased.

References

Question From: Session 11 > Reading 38 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #63 of 111

Question ID: 414874

The condition that occurs when a company disburses cash too quickly, stretching the company's cash reserves, is *best* described

as a:

- ✓ **A)** pull on liquidity.
- X **B)** drag on liquidity.
- X **C)** liquidity premium.

Explanation

When cash payments are made too quickly, the condition is known as a pull on liquidity. A drag on liquidity occurs when cash inflows lag.

References

Question From: Session 11 > Reading 39 > LOS a

Related Material:

- Key Concepts by LOS

Question #64 of 111

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>
X A)	\$31.25	\$34.00
X B)	\$31.25	\$37.00
✓ C)	\$34.00	\$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.

References

Question From: Session 11 > Reading 38 > LOS f

Related Material:

- Key Concepts by LOS
-

Question #65 of 111

Question ID: 414842

Wanton's San Ysidro Co. manufactures custom door knobs for international clients. Average Revenue is \$35 per unit, variable costs are \$15 per unit, and total costs are \$200,000. If sales are 10,000 units, what is the firm's breakeven sales quantity?

- ✓ **A)** 2,500 units.
- X **B)** 3,000 units.
- X **C)** 1,750 units.

Explanation

For this problem you need 2 equations.

Break-even quantity = Fixed Costs / (Price - Variable cost)

$$Q = FC / (P - V)$$

Fixed Costs = Total Costs - Variable Costs

$$FC = TC - VC = 200,000 - 150,000 = 50,000$$

$$Q = 50,000 / (35 - 15) = 2,500$$

References

Question From: Session 11 > Reading 37 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #66 of 111

Question ID: 414862

Laura's Chocolates, Inc. (LC), is a maker of nut-based toffees. LC is considering a share repurchase and prefers the "tender offer" method. Which of the following is also known as a "tender offer"?

- X **A)** Buying in the open market.
- X **B)** Repurchasing by direct negotiation.
- ✓ **C)** Buying a fixed number of shares at a fixed price.

Explanation

A tender offer refers to buying a fixed number of shares at a fixed price (usually at a premium to the current market price).

References

Question From: Session 11 > Reading 38 > LOS c

Related Material:

- Key Concepts by LOS

Question #67 of 111

Question ID: 414900

With respect to inventory management,:

- X **A)** a firm with inventory turnover higher than the industry average can be expected to have better profitability as a result.
- ✓ **B)** an increase in days of inventory on hand can be the result of either good or poor inventory management.
- X **C)** a decrease in a firm's days of inventory on hand indicates better inventory management and can lead to increased profits.

Explanation

An increase in inventory could indicate poor sales and an accumulation of obsolete items or could be the result of a conscious effort to have adequate supplies to avoid losses from not having items to satisfy customer orders (stock outs). Higher-than-average inventory turnover could indicate better inventory management or could indicate that a less than optimal inventory is being maintained by the company.

References

Question From: Session 11 > Reading 39 > LOS f

Related Material:

- Key Concepts by LOS

Question #68 of 111

Question ID: 414834

An analyst has gathered the following expenditure information for three different firms, each of which has a sales level of \$4 million.

<i>Costs for firms under consideration (in millions)</i>			
	<i>Firm A</i>	<i>Firm B</i>	<i>Firm C</i>
Variable Costs	\$2.00	\$2.60	\$2.40
Fixed Costs	\$1.00	\$1.30	\$1.40
Interest Expense	\$0.20	\$0.00	\$0.20

Which firm has the *highest* degree of operating leverage (DOL)?

- ✓ **A)** Firm B.
- X **B)** Firm A.
- X **C)** Firm C.

Explanation

The DOL for the three companies is as follows:

$$\text{DOL} = (\text{Total Revenue} - \text{Total Variable Costs}) / (\text{TR} - \text{TVC} - \text{Total Fixed Costs})$$

$$\text{Firm A: } (\$4.00 - \$2.00) / (\$4.00 - \$2.00 - \$1.00) = 2$$

$$\text{Firm B: } (\$4.00 - \$2.60) / (\$4.00 - \$2.60 - \$1.30) = 14$$

$$\text{Firm C: } (\$4.00 - \$2.40) / (\$4.00 - \$2.40 - \$1.40) = 8$$

(Note: Interest expense does not affect operating leverage.)

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #69 of 111

Question ID: 434341

The combination of operating risk and sales risk is known as:

- X **A)** financial risk.
- ✓ **B)** business risk.
- X **C)** gearing risk.

Explanation

Business risk is the combination of sales risk and operating risk. Business risk refers to the risk associated with a firm's operating income and is the result of uncertainty about a firm's revenues and the expenditures necessary to produce those revenues.

Sales risk is the uncertainty about the firm's sales. Operating risk refers to the additional uncertainty about operating earnings caused by fixed operating costs. The greater the proportion of fixed costs to variable costs, the greater a firm's operating risk.

Financial risk refers to the additional risk that the firm's common stockholders must bear when a firm uses fixed cost (debt) financing. Gearing is a British term that refers to leverage.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS

Question #70 of 111

Question ID: 414829

Stromburg Corporation's sales are \$75,000,000. Fixed costs, including research and development, are \$40,000,000, while variable costs amount to 30% of sales. Stromburg plans an expansion which will generate additional fixed costs of \$15,000,000, decrease variable costs to 25% of sales, and permit sales to increase to \$100,000,000. What is Stromburg's degree of operating leverage at the new projected sales level?

- ✓ **A)** 3.75.
- X **B)** 3.50.
- X **C)** 4.20.

Explanation

Sales = \$100,000,000

VC of 25% of sales = 25,000,000

FC of 40,000,000 + 15,000,000 = 55,000,000

$DOL = [100,000,000 - 25,000,000] / [100,000,000 - 25,000,000 - 55,000,000] = 3.75$

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #71 of 111

Question ID: 434339

Which of the following sources of financing is *least likely* to increase a firm's financial risk?

- X **A)** Fixed-rate debt.
- ✓ **B)** Common equity.
- X **C)** Operating leases.

Explanation

Financial risk, in the context of a firm's financing of its operations, results from taking on fixed financial obligations such as debt or operating leases. Common equity financing does not involve fixed obligations.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #72 of 111

Question ID: 434357

Yields on firms' investments in short-term securities for comparison purposes are *best* stated as:

X **A)** holding period return $\left(\frac{360}{\text{days to maturity}} \right)$.

X **B)** $\frac{\text{discount}}{\text{face}} \left(\frac{360}{\text{days to maturity}} \right)$.

✓ **C)** holding period return $\left(\frac{365}{\text{days to maturity}} \right)$.

Explanation

The yields on investments in short-term securities should be stated as bond equivalent yields (BEYs), and returns on portfolios of these securities should be stated as a weighted average of BEYs. The BEY, which is holding period yield $\times \left(\frac{365}{\text{days to maturity}} \right)$, allows fixed-income securities whose payments are not annual to be compared with securities with annual yields.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS

Question #73 of 111

Question ID: 460668

Pierce Motor Company has an operating cycle of 150 days and a cash conversion cycle of 120 days, while Dunhill Motor, Inc. has an operating cycle of 140 days and a cash conversion cycle of 125 days. Based on these figures it is *most likely* that:

X **A)** average days of inventory for Dunhill is less than for Pierce.

✓ **B)** average days of payables for Dunhill is less than for Pierce.

X **C)** average days of receivables for Dunhill is less than for Pierce.

Explanation

The operating cycle is days of inventory plus days of receivables. The cash conversion cycle is the operating cycle minus days of payables. Therefore, average days of payables are the operating cycle minus the cash conversion cycle. Dunhill's average days of payables ($140 - 125 = 15$) are less than Pierce's average days of payables ($150 - 120 = 30$). Which company has higher average days of inventory or receivables cannot be determined from the information provided.

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS

Question #74 of 111

Question ID: 414869

The current stock price of Westkirk is \$50.00 per share. Book value of equity is \$200 million and 10 million shares are outstanding. If Westkirk repurchases \$25 million of their stock, the change in book value per share after the repurchase is *closest* to a(n):

- ☐ A) decrease of \$2.50.
- ☒ B) decrease of \$1.60.
- ☐ C) increase of \$1.10.

Explanation

Book value per share before the repurchase = \$200 million / 10 million shares = \$20.00 per share.

Shares repurchased = \$25 million / \$50.00 = 500,000 shares.

Remaining shares = 10 million - 500,000 = 9.5 million shares.

After the repurchase, book value = \$200 million - \$25 million = \$175 million.

Book value per share after the repurchase = \$175 million / 9.5 million shares = \$18.42.

Difference = \$18.42 - \$20.00 = -\$1.58 per share.

References

Question From: Session 11 > Reading 38 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #75 of 111

Question ID: 414892

A 30-day bank certificate of deposit has a holding period yield of 1%. What is the annual yield of this CD on a bond-equivalent basis?

- ☒ A) 12.17%.
- ☐ B) 12.00%.
- ☐ C) 11.83%.

Explanation

The bond-equivalent yield is calculated as the holding period yield times (365 / number of days in the holding period). $BEY = 1\% \times (365/30) = 12.17\%$.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #76 of 111

Question ID: 414848

Nelson, Inc. has fixed financing costs of \$3 million, fixed operating costs of \$5 million, and variable costs of \$2.00 per unit. If the price of Nelson's product is \$4.00, Nelson's operating breakeven quantity of sales is:

- ✓ **A)** 2.5 million units.
- X **B)** 1.0 million units.
- X **C)** 4.0 million units.

Explanation

Operating breakeven quantity = fixed operating costs / (price - variable cost per unit) = \$5 million / (\$4.00 - \$2.00) = 2,500,000 units.

References

Question From: Session 11 > Reading 37 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #77 of 111

Question ID: 414905

Which of the following sources of short-term liquidity is considered reliable enough that it can be listed in the footnotes to a firm's financial statements as a source of liquidity?

- X **A)** Factoring agreement.
- ✓ **B)** Revolving line of credit.
- X **C)** Uncommitted line of credit.

Explanation

With an uncommitted line of credit, the lender is not committed to make loans in any amount. A revolving line of credit is typically for a longer period and involves an agreement to lend funds in the future up to some maximum amount. Factoring does not typically involve an agreement for future receivables purchases.

References

Question From: Session 11 > Reading 39 > LOS g

Related Material:

- Key Concepts by LOS
-

Question #78 of 111

Question ID: 414888

An appropriate cash management strategy for a company that has a seasonally high need for cash prior to the holiday shopping season would *least likely* include:

- X **A)** borrowing funds through a bank line of credit.
- X **B)** allowing short-term securities to mature without reinvestment.
- ✓ **C)** investing in U.S. Treasury notes at other times of the year because they are highly liquid.

Explanation

Treasury notes have maturities between 2 and 10 years and, thus, have maturities longer than those of securities suitable for cash management. Allowing short-term securities to mature without reinvesting the cash generated would be one way to meet seasonal cash needs. Short-term bank borrowing or issuing commercial paper that can be paid off when holiday sales generate cash would be appropriate strategies for dealing with a predictable short-term need for cash.

References

Question From: Session 11 > Reading 39 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #79 of 111

Question ID: 460671

Randox Industries has the following investment policy statement: "In order to achieve the safety and liquidity necessary in the investment of excess cash balances, the CFO or his designee may invest excess cash balances in 30-day U.S. Treasury bills, or in banker's acceptances with maturities of less than 31 days or 30-day certificates of deposit, where the credit rating of the issuing bank is A+ or higher." This policy statement is:

- X **A)** appropriate because these are all safe, liquid securities.
- X **B)** inappropriate because both banker's acceptances and certificates of deposit are illiquid.
- ✓ **C)** inappropriate because it is too restrictive.

Explanation

The policy statement is inappropriate because it is too restrictive. A policy statement should focus on meeting the specific safety and liquidity needs of the firm but should also allow the flexibility to increase yield within these constraints. There are many other securities potentially suitable for cash management that would provide equivalent or better liquidity and safety of principal at least equivalent to that of the securities issued by A+ rated banks.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS

Question #80 of 111

Question ID: 434340

The additional risk a firm's common shareholders must bear when a firm uses fixed cost financing is *best* described as:

- ✓ **A)** financial risk.
- X **B)** business risk.
- X **C)** operating risk.

Explanation

When a company finances its operations with fixed cost financing (debt), it takes on fixed expenses in the form of interest payments. The greater the proportion of debt in a firm's capital structure, the greater the firm's financial risk.

Business risk refers to the risk associated with a firm's operating income. Operating risk refers to the additional uncertainty about operating earnings caused by fixed operating costs.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #81 of 111

Question ID: 414884

Compared to the prior period, a firm has greater days of receivables. The effect on the firm's cash conversion cycle and operating cycle are *most likely* a(n):

- | | <u>Cash conversion cycle</u> | <u>Operating cycle</u> |
|-------------|------------------------------|------------------------|
| X A) | Decrease | Increase |
| X B) | Increase | Decrease |
| ✓ C) | Increase | Increase |

Explanation

Greater days of receivables will increase both the cash conversion cycle and operating cycle, other things equal.

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #82 of 111

Question ID: 414857

Which of the following shows the key dividend dates in their proper sequence?

- ☐ A) Declaration date, holder-of-record date, ex-dividend date, payment date.
- ☒ B) Declaration date, ex-dividend date, holder-of-record date, payment date.
- ☐ C) Ex-dividend date, holder-of-record date, declaration date, payment date.

Explanation

The board of directors announce the amount of the dividend, the holder-of-record date, and payment date. The ex-dividend date is two business days prior to the holder-of-record date, giving the firm time to identify the rightful owner of the dividends.

References

Question From: Session 11 > Reading 38 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #83 of 111

Question ID: 414879

A firm has average days of receivables outstanding of 22 compared to an industry average of 29 days. An analyst would *most likely* conclude that the firm:

- ☐ A) has a lower cash conversion cycle than its peer companies.
- ☒ B) may have credit policies that are too strict.
- ☐ C) has better credit controls than its peer companies.

Explanation

The firm's average days of receivables should be close to the industry average. A significantly lower average days receivables outstanding, compared to its peers, is an indication that the firm's credit policy may be too strict and that sales are being lost to peers because of this. We can not assume that stricter credit controls than the average for the industry are "better." We cannot conclude that credit sales are less, they may be more, but just made on stricter terms. The average days of receivables are only one component of the cash conversion cycle.

References

Question From: Session 11 > Reading 39 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #84 of 111

Question ID: 434347

Pants R Us Inc.'s Board of Directors is considering repurchasing \$30,000,000 worth of common stock. Pants R Us assumes that the stock can be repurchased at the market price of \$50 per share. After much discussion Pants R Us decides to borrow \$30 million that it will use to repurchase shares. Pants R Us' Chief Investment Officer (CIO) has compiled the following information regarding the repurchase of the firm's common stock:

- Share price at the time of buyback = \$50
- Shares outstanding before buyback = 30,600,000
- EPS before buyback = \$3.33
- Earnings yield = $\$3.33 / \$50 = 6.7\%$
- After-tax cost of borrowing = 6.7%
- Planned buyback = 600,000 shares

Based on the information above, what will be Pants R Us' earnings per share (EPS) after the repurchase of its common stock?

- X A) \$3.40.
- X B) \$3.28.
- ✓ C) \$3.33.

Explanation

Total earnings = $\$3.33 \times 30,600,000 = \$101,898,000$

$$\begin{aligned}
 \text{EPS after buyback} &= \frac{\text{total earnings} - \text{after-tax cost of funds}}{\text{shares outstanding after buyback}} \\
 &= \frac{\$101,898,000 - (600,000 \text{ shares} \times \$50 \times 0.067)}{(30,600,000 - 600,000) \text{ shares}} \\
 &= \frac{\$101,898,000 - \$2,010,000}{30,000,000 \text{ shares}} \\
 &= \frac{\$99,888,000}{30,000,000 \text{ shares}} \\
 &= \$3.33
 \end{aligned}$$

Since the after-tax cost of borrowing of 6.7% is equal to the 6.7% earnings yield (E/P) of the shares, the share repurchase has no effect on Pants R Us' EPS.

References

Question From: Session 11 > Reading 38 > LOS d

Related Material:

- Key Concepts by LOS

Question #85 of 111

Question ID: 414878

Alton Industries will have better liquidity than its peer group of companies if its:

- X **A)** quick ratio is lower.
- X **B)** average trade payables are lower.
- ✓ **C)** receivables turnover is higher.

Explanation

Higher receivables turnover is an indicator of better receivables liquidity since receivables are converted to cash more rapidly. A lower quick ratio is an indication of less liquidity. Lower trade payables could be related to better liquidity, but could also be consistent with very poor liquidity and a requirement from its suppliers of cash payment.

References

Question From: Session 11 > Reading 39 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #86 of 111

Question ID: 414821

The two major types of risk affecting a firm are:

- X **A)** financial risk and cash flow risk.
- ✓ **B)** business risk and financial risk.
- X **C)** business risk and collection risk.

Explanation

Business risk is the uncertainty regarding the operating income of a company. Financial risk refers to the uncertainty caused by the fixed cost associated with borrowed money.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #87 of 111

Question ID: 414880

The quick ratio is considered a more conservative measure of liquidity than the current ratio because the quick ratio excludes:

- X **A)** accounts receivable, which may not be collectible in the short term.
- X **B)** short-term marketable securities, which may need to be sold at a significant loss.
- ✓ **C)** inventories, which are not necessarily liquid.

Explanation

The quick ratio is usually defined as (current assets - inventory) / current liabilities. It is a more restrictive measure of liquidity than the current ratio, which equals current assets / current liabilities. The numerator of the quick ratio includes cash, receivables, and short-term marketable securities.

References

Question From: Session 11 > Reading 39 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #88 of 111

Question ID: 550542

Which of the following factors is *least likely* to affect business risk?

- X **A)** Operating leverage.
- ✓ **B)** Interest rate variability.
- X **C)** Demand variability.

Explanation

Business risk can be defined as the uncertainty inherent in a firm's return on assets (ROA). While changes in interest rates may impact the demand or input prices, there is a more direct impact on business risk with the other two choices.

References

Question From: Session 11 > Reading 37 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #89 of 111

Question ID: 434342

FCO, Inc. (FCO) is comparing EBIT forecasts to help determine the impact its capital structure has on net income.

	<u>Expected EBIT</u>	<u>EBIT + 10%</u>
EBIT	\$80,000	\$88,000
Interest expense	15,000	15,000
EBT	65,000	73,000
Taxes	26,000	29,200
Net income	39,000	43,800

Liabilities	200,000
Shareholder equity	250,000
Return on equity	15.60%

FCO's degree of financial leverage is *closest* to:

- X **A)** 0.80.
- X **B)** 0.60.
- ✓ **C)** 1.25.

Explanation

The degree of financial leverage (DFL) is interpreted as the ratio of the percentage change in net income to the percentage change in EBIT. FCO can compare two EBIT forecasts to determine how net income is being driven by financial leverage.

$$DFL = \frac{(NI_1 - NI_0) / NI_0}{(EBIT_1 - EBIT_0) / EBIT_0}$$

$$DFL = \frac{(43,800 - 39,000) / 39,000}{(88,000 - 80,000) / 80,000} = \frac{0.123}{0.100} = 1.23$$

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS

Question #90 of 111

Question ID: 414872

Ignoring tax consequences, given a choice between a cash dividend and a share repurchase of the same amount, a rational investor would:

- ✓ **A)** be indifferent between a cash dividend and a share repurchase.
- X **B)** prefer a cash dividend to a share repurchase.
- X **C)** prefer a share repurchase to a cash dividend.

Explanation

Both a cash dividend and a share repurchase for the same amount of cash leave shareholder wealth unchanged if we ignore taxes. The value of a cash dividend per share plus the post-dividend price per share equals the price per share after a share repurchase of the same amount.

References

Question From: Session 11 > Reading 38 > LOS f

Related Material:

- Key Concepts by LOS

Question #91 of 111

Question ID: 414844

Annah Korotkin is the sole proprietor of CoverMeUp, a business that designs and sews outdoor clothing for dogs. Each year, she rents a booth at the regional Pet Expo and sells only blankets. Korotkin views the Expo as primarily a marketing tool and is happy to breakeven (that is, cover her booth rental). For the last 3 years, she has sold exactly enough blankets to cover the \$750 booth rental fee. This year, she decided to make all blankets for the Expo out of high-tech waterproof/breathable material that is more expensive to produce, but that she believes she can sell for a higher profit margin. Information on the two types of blankets is as follows:

<i>Per Unit</i>	<i>Last Year's (Basic) Blanket</i>	<i>This Year's (New) Blanket</i>
Sales Price	\$25	\$40
Variable Cost	\$20	\$33

Assuming that Korotkin remains most interested in covering the booth cost (which has increased to \$840), how many more or fewer blankets (new style) does she need to sell to cover the booth cost? To cover this year's booth costs, Korotkin needs to sell:

- ✓ **A)** 30 fewer blankets than last year.
- X **B)** 42 more blankets than last year.
- X **C)** 42 fewer blankets than last year.

Explanation

To obtain this result, we need to calculate Last Year's Breakeven Quantity, This Year's Breakeven Quantity, and calculate the difference.

Step 1: Determine Last Year's (Basic Blanket) breakeven quantity:

$$Q_{BE} = (\text{Fixed Costs}) / (\text{Sales Price per unit} - \text{Variable Cost per unit}) = 750 / (25 - 20) = 150$$

Step 2: Determine This Year's (New Blanket) breakeven quantity:

$$Q_{BE} = (\text{Fixed Costs}) / (\text{Sales Price per unit} - \text{Variable Cost per unit}) = 840 / (40 - 33) = 120$$

Step 3: Determine Change in Units:

$$DQ = Q_{\text{This Year}} - Q_{\text{Last Year}} = 120 - 150 = -30. \text{ Korotkin needs to sell 30 fewer blankets.}$$

References

Question From: Session 11 > Reading 37 > LOS d

Related Material:

- Key Concepts by LOS

Question #92 of 111

Question ID: 414887

The *least* appropriate security for investing short-term excess cash balances would be:

- ☐ A) bank certificates of deposit.
- ☒ B) preferred stock.
- ☐ C) time deposits.

Explanation

While adjustable-rate preferred is an appropriate security for short-term investment of excess cash balances, other preferred shares are not. Bank certificates of deposit and time deposits can be for appropriately short periods.

References

Question From: Session 11 > Reading 39 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #93 of 111

Question ID: 414854

What is the earliest day on which an investor can currently purchase Amex, Inc., if the investor wants to avoid receiving a dividend and thereby avoid paying tax on the distribution, if the date of record is Thursday, October 31?

- ☐ A) Thursday, October 24.
- ☒ B) Tuesday, October 29.
- ☐ C) Monday, October 28.

Explanation

The ex-dividend date is now two business days prior to the date of record. Counting back two business days identifies Tuesday, October 29 as the date when the shares can be purchased without the dividend.

References

Question From: Session 11 > Reading 38 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #94 of 111

Question ID: 414833

All else equal, which of the following statements about operating leverage is *least* accurate?

- ☐ A) Operating leverage reflects the tradeoff between variable costs and fixed costs.

- X **B)** Firms with high operating leverage experience greater variance in operating income.
- ✓ **C)** Lower operating leverage generally results in a higher expected rate of return.

Explanation

Operating leverage is the trade off between fixed and variable costs. Higher operating leverage typically is indicative of a firm with higher levels of risk (greater income variance). Given the positive risk/return relationship, higher operating leverage firms are expected to have a higher rate of return. And, lower operating leverage firms are expected to have a lower rate of return.

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #95 of 111

Question ID: 414893

A 91-day Treasury bill has a holding period yield of 1.5%. What is the annual yield of this T-bill on a bond-equivalent basis?

- X **A)** 6.24%.
- ✓ **B)** 6.02%.
- X **C)** 6.65%.

Explanation

$BEY = 1.5\% \times (365/91) = 6.02\%$.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #96 of 111

Question ID: 414828

The following information reflects the projected operating results for Opstalan, a catalog printer.

- Sales of \$5.0 million.
- Variable Costs at 40% of sales.
- Fixed Costs of \$1.0 million.
- Debt interest payments on \$1.5 million issued with an annual 7.0% coupon (current yield is 8.0%).
- Tax Rate of 0.0%.

Opstalan's degree of total leverage (DTL) is *closest* to:

- ✓ **A)** 1.59.
- ✗ **B)** 1.41.
- ✗ **C)** 2.58.

Explanation

First, calculate the operating results:

Opstalan Annual Operating Results

Sales	\$5,000,000
Variable Costs ¹	<u>2,000,000</u>
	3,000,000
Fixed Costs	<u>1,000,000</u>
EBIT	<u>2,000,000</u>
Interest Expense ²	<u>105,000</u>
	1,895,000

¹Variable costs = 0.40 × 5,000,000

²Interest Expense = 0.07 × 1,500,000

Second, calculate DOL = (Sales – Variable Costs) / (Sales – Variable Costs – Fixed Costs) = 3,000,000 / 2,000,000 = 1.50

Third, calculate DFL = EBIT / (EBIT – I) = 2,000,000 / 1,895,000 = 1.06.

Finally, calculate DTL = DOL × DFL = 1.50 × 1.06 = 1.59.

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS

Question #97 of 111

Question ID: 485790

Given the following information on the annual operating results for ArtFrames, a producer of quality metal picture frames:

- Sales of \$3,500,000.
- Variable costs at 45% of sales.
- Fixed costs of \$1,050,000.
- Debt interest payments on \$750,000 issued at par with an annual 9.0% coupon; market yield is currently 7.0%.

ArtFrames's degree of operating leverage (DOL) and degree of financial leverage (DFL) are *closest to*:

DOL

DFL

- ✓ **A)** 2.20 1.08
- X **B)** 3.00 1.50
- X **C)** 2.20 1.50

Explanation

$DOL = (\text{sales} - \text{variable costs}) / (\text{sales} - \text{variable costs} - \text{fixed costs})$

Variable costs = $\$3,500,000 \times 45\% = \$1,575,000$

Fixed costs = $\$1,050,000$

$DOL = (\$3,500,000 - \$1,575,000) / (\$3,500,000 - \$1,575,000 - \$1,050,000) = 2.20$

$DFL = EBIT / (EBIT - \text{interest})$

Interest = $\$750,000 \times 9\% = \$67,500$

EBIT = sales - variable costs - fixed costs = $\$3,500,000 - \$1,575,000 - \$1,050,000 = \$875,000$

$DFL = \$875,000 / (\$875,000 - \$67,500) = 1.08$

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #98 of 111

Question ID: 414875

An example of a primary source of liquidity is:

- X **A)** renegotiating debt agreements.
- X **B)** filing for bankruptcy.
- ✓ **C)** using trade credit from vendors.

Explanation

Primary sources of liquidity include cash resulting from selling goods and services, collecting receivables, generating cash from other sources and sources of short-term funding such as trade credit from vendors and lines of credit from banks. Filing for bankruptcy and renegotiating debt agreements are secondary sources of liquidity.

References

Question From: Session 11 > Reading 39 > LOS a

Related Material:

- Key Concepts by LOS
-

Question #99 of 111

Question ID: 414860

Jim Davis and Thurgood Owen, two equity analysts at Ferguson Capital Management, were reviewing the financial statements of Peregrine Foodstuffs Ltd. Davis and Owen noticed that Peregrine has been repurchasing its common shares in the market over the past three years. Owen thought this was an important issue to look into in greater detail. Upon completion of his review, Owen made the following two statements:

Statement 1: Peregrine has bought back shares in the open market during its repurchase program. This method of repurchase gave the company the flexibility to choose the timing of the transaction.

Statement 2: Peregrine plans to buy back shares by making tender offers during the coming year. By making tender offers, the company will be able to repurchase shares at a discount to the prevailing market price.

With respect to Owen's statements:

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

Explanation

Buying in the open market gives the company the flexibility to choose the timing of the transaction. Thus, Statement 1 is correct. A second way is to buy a fixed number of shares at a fixed price. A company may repurchase stock by making a tender offer to repurchase a specific number of shares at a price that is at a *premium* to the current market price. They would not be willing to tender their shares for less than the prevailing market price, so Statement 2 is incorrect.

References

Question From: Session 11 > Reading 38 > LOS c

Related Material:

- Key Concepts by LOS

Question #100 of 111

Question ID: 434343

A company's use of financial leverage:

- X **A)** decreases default risk and decreases potential return on equity.
- X **B)** increases default risk and decreases potential return on equity.
- ✓ **C)** increases default risk and increases potential return on equity.

Explanation

Issuing debt introduces default risk. The interest expense associated with using debt represents a fixed cost that reduces net income. However, compared to financing entirely with equity, the lower net income is spread over a smaller base of shareholders' equity. This financing structure increases the potential return on equity.

References

Related Material:

- Key Concepts by LOS

Question #101 of 111

Question ID: 434348

Francis Investment Inc's Board of Directors is considering repurchasing \$30,000,000 worth of common stock. Francis assumes that the stock can be repurchased at the market price of \$50 per share. After much discussion Francis decides to borrow \$30 million that it will use to repurchase shares. Francis' Chief Financial Officer (CFO) has compiled the following information regarding the repurchase of the firm's common stock:

- Share price at the time of buyback = \$50
- Shares outstanding before buyback = 30,600,000
- EPS before buyback = \$3.33
- Earnings yield = $\$3.33 / \$50 = 6.7\%$
- After-tax cost of borrowing = 4%
- Planned buyback = 600,000 shares

Based on the information above, after the repurchase of its common stock, Francis' EPS will be *closest* to:

- ✓ **A) \$3.36.**
- X **B) \$3.39.**
- X **C) \$3.41.**

Explanation

Total earnings = $\$3.33 \times 30,600,000 = \$101,898,000$

$$\begin{aligned}\text{EPS after buyback} &= \frac{\text{total earnings} - \text{after-tax cost of funds}}{\text{shares outstanding after buyback}} \\ &= \frac{\$101,898,000 - (600,000 \text{ shares} \times \$50 \times 0.04)}{(30,600,000 - 600,000) \text{ shares}} \\ &= \frac{\$101,898,000 - \$1,200,000}{30,000,000 \text{ shares}} \\ &= \frac{\$100,698,000}{30,000,000 \text{ shares}} \\ &= \$3.36\end{aligned}$$

Since the after-tax cost of borrowing of 4% is less than the 6.7% earnings yield (E/P) of the shares, the share repurchase will increase Francis's EPS.

References

Related Material:

- Key Concepts by LOS
-

Question #102 of 111

Question ID: 414839

Financial leverage magnifies:

- ☐ A) taxes.
- ☐ B) operating income variability.
- ☒ C) earnings per share variability.

Explanation

Financial leverage results in the existence of required interest payments and, hence, increased earnings per share variability. Higher debt ratios, given a fixed asset base, result in a greater earnings per share variability. Operating income is based on the products and assets of the firm and not on the firm's financing and, hence, has no impact on financial leverage. Greater financial leverage is likely to reduce taxes due to the tax deductibility of interest payments.

References

Question From: Session 11 > Reading 37 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #103 of 111

Question ID: 434345

The purchaser of a stock will receive the next dividend if the order is filled before the:

- ☐ A) holder-of-record date.
- ☒ B) ex-dividend date.
- ☐ C) payment date.

Explanation

The ex-dividend date is the cutoff date for receiving the dividend and occurs two business days before the holder-of-record date. This is because settlement of stock trades occurs three days after the trade is executed (T+3). An investor who buys a share on or after the ex-dividend date will not receive the dividend.

References

Question From: Session 11 > Reading 38 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #104 of 111

Question ID: 434353

Compared to the prior year, Chart Industries has reported that its operating cycle has remained relatively stable while its cash conversion cycle has decreased. The *most likely* explanation for this is that the firm:

- ☐ A) is paying its bills for raw materials more rapidly.
- ☐ B) has improved its inventory turnover.
- ☒ C) is relying more on its suppliers for short-term liquidity.

Explanation

The cash conversion cycle is its operating cycle minus its average days payables outstanding. Therefore, the firm's average days payables must have increased, a clear indication that the firm is relying more heavily on credit from its suppliers. Improved inventory turnover would tend to decrease both the operating and cash conversion cycles. Relaxed credit policies would tend to increase the firm's operating cycle as receivables turnover would tend to decrease.

References

Question From: Session 11 > Reading 39 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #105 of 111

Question ID: 434346

A company is most likely to use a Dutch auction when repurchasing shares:

- ☒ A) with a tender offer.
- ☐ B) by direct negotiation.
- ☐ C) in the open market.

Explanation

In a tender offer, the company may either select a price or use a Dutch auction to determine the lowest price at which it can repurchase the number of shares desired.

References

Question From: Session 11 > Reading 38 > LOS c

Related Material:

- Key Concepts by LOS
-

Question #106 of 111

Question ID: 414827

Which of the following statements about leverage is *most* accurate?

- ✓ **A)** If the company has no debt outstanding, then its degree of total leverage equals its degree of operating leverage.
- ✗ **B)** An increase in fixed costs (holding sales and variable costs constant) will reduce the company's degree of operating leverage.
- ✗ **C)** A decrease in interest expense will increase the company's degree of total leverage.

Explanation

If debt = 0 then $DFL = 1$ because $DFL = EBIT / (EBIT - I)$

If debt = 0 then $I = 0$ and $DFL = EBIT / (EBIT - 0) = EBIT / EBIT = 1$

$DTL = (DOL)(DFL)$

If $DFL = 1$ then $DTL = (DOL)(1)$ which complies to $DTL = DOL$

A decrease in interest expense will decrease DFL, which will decrease DTL. An increase in fixed costs will increase the company's DOL.

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #107 of 111

Question ID: 414896

A banker's acceptance that is priced at \$99,145 and matures in 72 days at \$100,000 has a(n):

- ✓ **A)** money market yield greater than its discount yield.
- ✗ **B)** bond equivalent yield greater than its effective annual yield.
- ✗ **C)** discount yield greater than its bond equivalent yield.

Explanation

The money market yield is the holding period yield times $360/72$ and is always greater than the discount yield which is the actual discount from face value times $360/72$, since the holding period yield is always greater than the percentage discount from face value. A security's discount yield and its money market yield are always less than its bond equivalent yield, and its effective annual yield is always greater than its bond equivalent yield.

References

Question From: Session 11 > Reading 39 > LOS e

Related Material:

- Key Concepts by LOS
-

Question #108 of 111

Question ID: 414824

As financial leverage increases, what will be the impact on the expected rate of return and financial risk?

- ✓ **A)** Both will rise.
- X **B)** Both will fall.
- X **C)** One will rise while the other falls.

Explanation

A higher breakeven point resulting from increased interest costs associated with debt financing increases the risk of the company. Since the risk is tied to firm financing, it is referred to as financial risk. Given the positive risk-return relationship, the expected return of the company's common stock also rises.

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #109 of 111

Question ID: 414823

During a period of expansion in the economy, compared to firms with lower operating expense levels, earnings growth for firms with high operating leverage will be:

- ✓ **A)** higher.
- X **B)** unaffected.
- X **C)** lower.

Explanation

If a high percentage of a firm's total costs are fixed, the firm is said to have high operating leverage. High operating leverage, other things held constant, means that a relatively small change in sales will result in a large change in operating income. Therefore, during an expansionary phase in the economy a highly leveraged firm will have higher earnings growth than a lesser leveraged firm. The opposite will happen during an economic contraction.

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS
-

Question #110 of 111

Question ID: 414846

Jayco, Inc., sells blue ink for \$4.00 a bottle. The ink's variable cost per bottle is \$2.00. Ink has fixed cost of \$10,000. What is Jayco's breakeven point in units?

- X **A)** 6,000.
- X **B)** 2,500.
- ✓ **C)** 5,000.

Explanation

$$Q_{BE} = [FC] / (P - V)$$

$$Q_{BE} = [10,000] / (4.00 - 2.00) = 5,000$$

References

Question From: Session 11 > Reading 37 > LOS d

Related Material:

- Key Concepts by LOS
-

Question #111 of 111

Question ID: 414825

If a 10% increase in sales causes EPS to increase from \$1.00 to \$1.50, and if the firm uses no debt, then what is its degree of operating leverage?

- X **A)** 4.2.
- X **B)** 4.7.
- ✓ **C)** 5.0.

Explanation

Upon first glance, it appears there is not enough information to complete the problem. However when one realizes $DTL = (DOL)(DFL)$ it is possible to complete this problem.

$$DTL = \frac{\% \Delta EPS}{\% \Delta Sales} = 5$$

$$DFL = \frac{EBIT}{EBIT - I} = 1.$$

$$(DOL)(1) = 5$$

$$DOL = 5.$$

References

Question From: Session 11 > Reading 37 > LOS b

Related Material:

- Key Concepts by LOS

