CFA Level II

Questions #1-6 of 60

Questions 61 through 66 relate to Ethical and Professional Standards.

United Partners Case Scenario

Connor Burton, CFA, is the managing partner for United Partners, a small investment advisory firm that employs three investment professionals and currently has approximately $250 million of assets under management. The client base of United Partners is varied, and accounts range in size from small retirement accounts to a $30 million private school endowment. In addition to Burton's administrative responsibilities as the managing partner at United, he also serves as an investment advisor to several clients. Because United Partners is a small firm, the company does not employ any research analysts but instead obtains its investment research products and services from two national brokerage firms, which in turn execute all client trades for United Partners. The arrangement with the two brokers has enabled United to assure its clients that the firm will always seek the best execution for them by having both brokers competitively bid for United's business.

A prospective client, Harold Crossley, has approached Burton about shifting some of his personal assets under management from MoneyCorp to United Partners. Burton provides Crossley with a packet of marketing information that Burton developed himself. The packet contains five years of historical performance data for a value weighted composite of the firm's discretionary accounts. Burton states that the composite's management style and performance results are representative of the management style and returns that United can be expected to achieve for Crossley. Also included in the information packet are brief bios on each of United's three investment professionals. Crossley notices that all three of United's investment professionals are described as "CFA charterholders," but he is not familiar with the designation. In response to Crossley's inquiry, Burton explains the significance of the program by stating that the designation, which is only awarded after passing three rigorous exams and obtaining the requisite years of work experience, represents a commitment to the highest standards of ethical and professional conduct.

As a condition of moving his account to United Partners, Crossley insists that all of his trades be executed through his brother-in-law, a broker for Security Bank. Security Bank is a large, New York-based broker/dealer but is not one of the two brokerage firms with which United currently does business. Burton contacts Crossley's brother-in-law and determines that Security Bank's trade execution is competitive, but Crossley's account alone would not generate enough volume to warrant any soft dollar arrangement for research materials. However, Crossley's brother-in-law does offer for Security Bank to pay a referral fee to Burton for directing any of United's clients to Security Bank's retail banking division. To bring Crossley on as a client, Burton agrees to the arrangement. Going forward, Burton will use Security Bank to execute all of Crossley's trades.

United Partners currently has no formal policy on proxy voting. Burton wants to develop a policy that conforms to the Code and Standards.

Several months later, Burton is invited to a road show for an initial public offering (IPO) for SolutionWare, a software company. Security Bank is serving as lead underwriter on SolutionWare's IPO. Burton attends the meeting, which is led by two investment bankers and one software industry research analyst from Security Bank who covers SolutionWare. Burton notes that the bankers from Security Bank have included detailed financial statements for SolutionWare in the offering prospectus and also disclosed that Security Bank provides a warehouse line of credit to SolutionWare. After the meeting, Burton calls Crossley to recommend the purchase of SolutionWare equity. Crossley heeds Burton's advice and tells him to purchase 5,000 shares. Before placing Crossley's order, Burton reads the SolutionWare marketing materials and performs a detailed analysis of expected future earnings and other key factors for the investment decision. Burton determines that the offering would be a suitable investment for his own retirement portfolio. United Partners, being a small firm, has no formal written policy regarding trade allocation, employee participation in equity offerings, or established blackout periods for employee trading. Burton adds his order to Crossley's order and places a purchase order for the combined number of shares with Security Bank. Burton is later notified that the offering was oversubscribed, and United Partners was only able to obtain roughly 75% of the desired number of shares. To be fair, Burton allocates the shares on a pro-rata basis between Crossley's account and his own retirement account. When Burton notifies Crossley of the situation, Crossley is nonetheless pleased to have a position, though smaller than requested, in such a "hot" offering.

Question #1 of 60

Question ID: 1220742

Did the marketing materials presented to Crossley by Burton violate Standard III(D) Performance Presentation or Standard VII(B) Reference to CFA Institute, the CFA Designation, and the CFA Program?

A) Standard III(D) only.

B) Standard VII(B) only.

C) Both Standard III(D) and Standard VII(B) are violated.

Explanation

By implying that the composite's past performance is representative of future performance, Burton is in violation of Standard III(D) Performance Presentation. A member or candidate should give a fair and complete presentation of performance and not state or imply that clients will obtain a rate of return that was generated in the past.

Burton's references to the CFA program in his marketing materials were acceptable according Standard VII(B) Reference to CFA Institute, the CFA Designation, and the CFA Program. The Standard states that members and candidates may make references to the rigor of the program and the commitment of members and candidates to ethical and professional standards. However, statements must not exaggerate the meaning or implications of the designation, membership in CFA Institute, or candidacy.

For Further Reference:

(Study Session 1, Module 2.6, LOS 2.a)

Question #2 of 60

Question ID: 1220743

According to the CFA Institute Standards of Professional Conduct, the trading arrangement between Burton and Security Bank is *most likely*:

A) a violation because the practice of directed brokerage violates the member's duty of loyalty to the client.

B) a violation because although Security Bank's execution is competitive, Burton will not be able to always obtain the best execution for his client.

C) **not a violation because the brokerage is the property of the client.**

Explanation

According to CFA Institute Standards of Professional Conduct, client brokerage is the property of the client; client-directed brokerage does not violate the duty of loyalty to clients. Members should disclose to the clients if such arrangements does not result in best execution for the clients (but this stipulation is not applicable in this case).

For Further Reference:

(Study Session 1, Module 2.4, LOS 2.a)

Question #3 of 60

Question ID: 1220744

According to CFA Institute Standards of Professional Conduct, which of the following statements *best* describes the circumstances under which Burton may enter into the referral agreement with Security Bank? Burton may enter into the agreement:

A) under no circumstances.

B) only after receiving written permission from clients.

C) **only after fully disclosing the referral arrangement to clients and prospective clients.**

Explanation

Standard VI(C) Referral Fees states that members and candidates must disclose to their clients and prospective clients any compensation or benefit received for the recommendation of services. In this case, Burton may accept a referral fee if he discloses it to the client so that the client may evaluate any partiality shown in the recommendation.

For Further Reference:

(Study Session 1, Module 2.9, LOS 2.a)

Question #4 of 60

Question ID: 1220745

When formulating the proxy voting policy, which of the following is *least* appropriate for Burton to include?

A) Determine the economic impact of non-routine proxy votes.

B) **Treat all proposals equally as far as proxy voting goes.**

C) If the client preference differs from the proxy voter's preference, defer to client wishes.

Explanation

Standard III(A) Loyalty, Prudence, and Care. Unusual proposals, such as hostile takeovers and executive changes, may require more review than routine matters such as renewing stock-repurchase agreements. Money managers should provide a means to review complex proxies. Establishing evaluation criteria and disclosing the firm's proxy voting policies and procedures to clients are basic elements of a proxy-voting policy. Client wishes regarding proxy voting should always be followed.

For Further Reference:

(Study Session 1, Module 2.4, LOS 2.a)

Question #5 of 60

Question ID: 1220746

According to CFA Institute Standards of Professional Conduct, Burton's recommendation to Crossley that he purchase shares of the SolutionWare initial public offering is *most likely*:

A) in violation of Standard III(C) Suitability for not determining the appropriateness of the investment for the portfolio and Standard I(B) Independence and Objectivity for not making the investment recommendation to all of his clients at the same time.

B) **in violation of Standard V(A) Diligence and Reasonable Basis for not thoroughly analyzing the investment before making a recommendation and in violation of Standard III(C) Suitability for not determining the appropriateness of the investment for the portfolio.**

C) in violation of Standard V(A) Diligence and Reasonable Basis for not thoroughly analyzing the investment before making a recommendation and in violation of Standard I(B) Independence and Objectivity for not making the investment recommendation to all of his clients at the same time.

Explanation

Standard V(A) Diligence and Reasonable Basis states that the member or candidate must exercise diligence, independence, and thoroughness before making an investment recommendation. The Standard also requires that members and candidates have a reasonable and adequate basis supported by research and investigation for any investment recommendations or actions. Burton made his purchase recommendation to Crossley purely on the basis of the Security Bank road show and did not perform his own evaluation to determine whether or not the SolutionWare IPO was a good investment opportunity. Burton has therefore violated Standard V(A). Standard III(C) Suitability was also violated because there is no indication that Burton made any effort to determine if the investment was appropriate for Crossley's portfolio. Burton should have determined that the investment was consistent with Crossley's written objectives and constraints before he recommended the investment. Even though he later determined that the investment was suitable, he did not know this was the case before he told Crossley that he should purchase shares in the IPO. Standard III(B) Fair Dealing (and not I(B) Independence and Objectivity) would also be violated if Burton did not afford all the clients for whom the IPO was suitable to participate in the offering. Standard III(B) Fair Dealing (and not standard I(B)) would also be violated if Burton did not extend IPO participation to all portfolios meeting suitability criteria.

For Further Reference:

(Study Session 1, Module 2.8, LOS 2.a)

Question #6 of 60

Question ID: 1220747

According to CFA Institute Standards of Professional Conduct, Burton's participation in the SolutionWare offering *most likely*:

A) **is in violation of the Standards because his actions adversely affected the interests of Crossley.**

B) is in violation of the Standards because he did not disclose his participation in the offering to Security Bank.

C) is not in violation of the Standards since the shares obtained in the IPO were distributed equitably on a pro-rata basis.

Explanation

Standard VI(B) Priority of Transactions clearly states that investment transactions for clients must have priority over members' and candidates' transactions. Members and candidates can profit from personal investments as long as the client is not disadvantaged by the trade. By taking a portion of the IPO shares for his own account, Burton has ensured that Crossley's order will not be completely filled. It does not matter that the trade allocation was done on a pro-rata basis; Burton should have placed his client's transaction ahead of his own.

For Further Reference:

(Study Session 1, Module 2.9, LOS 2.a)

Questions #7-12 of 60

Questions 67 through 72 relate to Quantitative Methods.

Madison Consultants Case Scenario

Ernie Smith and Jamal Sims are analysts with the firm of Madison Consultants. Madison provides statistical modeling and advice to portfolio managers throughout the United States and Canada.

In an effort to estimate future cash flows and value the Canadian stock market, Smith has been examining the country's aggregate retail sales. He runs two autoregressive regression models in an attempt to determine whether there are any patterns in the data, utilizing nine years of unadjusted monthly retail sales data. One model uses a lag 1 variable and the other adds a lag 12 variable. The results of both regressions are shown in Exhibit 1 and Exhibit 2.

Exhibit 1: Canadian Autoregressive Model With Lag 1

Multiple R	0.91
R-square	0.83
Adjusted R-square	0.83
Standard error	17,252.76
Observations	108.00

ANOVA

	df	SS	MS	F	Significance F
Regression	1.00	150,813,197,793	150,813,197,793	506.67	0.00
Residual	106.00	31,551,711,544	297,657,656		
Total	107.00	182,364,909,338			

	Coefficients	Standard Error	T-stat	P-value
Intercept	21,750.16	10,379.77	2.10	0.04
Lag 1	0.92	0.04	22.51	0.00

Exhibit 2: Canadian Autoregressive Model With Lag 1 and Lag 12

Regression Statistics for 2nd Regression	
Multiple R	0.96
R-square	0.93
Adjusted R-square	0.92
Standard error	11,336.27
Observations	108.00

ANOVA

	df	SS	MS	F	Significance F
Regression	2.00	168,871,246,751	84,435,623,375	657.03	<0.01
Residual	105.00	13,493,662,586	128,511,072		
Total	107.00	182,364,909,338			

	Coefficients	Standard Error	T-stat	P-value
Intercept	–24,861.28	7,872.56	–3.16	<0.01
Lag 1	0.30	0.06	5.22	<0.01
Lag 12	0.84	0.07	11.85	<0.01

Sims has been assigned the task of valuing the U.S. stock market and uses data similar to the data that Smith uses for Canada. He decides, however, that the data should be transformed. He takes the natural log of the data and uses it in the following model:

$$\Delta \ln \text{sales}_t = b_0 + b_1 \, \Delta \ln \text{sales}_{t-1}$$

Parameter estimates for the autoregressive model and the actual data for the two most recent months are shown in Exhibit 3.

Exhibit 3: U.S. Autoregressive Model

Intercept	0.052
Lag 1 coefficient	0.684
Actual sales one month ago (–1)	6,270
Actual sales two months ago (–2)	6,184

Smith and Sims are concerned that the data for Canadian retail sales may be more appropriately modeled with an ARCH process. Smith states, that in order to find out, he would take the residuals from the original autoregressive model for Canadian retail sales and then square them.

Sims states that these residuals would then be regressed against the Canadian retail sales data using the following equation: $e_t = b_0 + b_1X_t$, where *e* represents the residual terms from the original regression and *X* represents the Canadian retail sales data. If b_1 is statistically different from zero, then the regression model contains an ARCH process.

Smith also examines the quarterly inflation data for an emerging market over the past nine years. He models the data using an autoregressive model with a lag 1 independent variable, which he finds is statistically different from zero. He wonders whether he should also include lag 2 and lag 4 terms, given the magnitude of the autocorrelations of the residuals shown in Exhibit 4, assuming a 5% significance level. The critical *t*-values, assuming a 5% significance level and 35 degrees of freedom, are 2.03 for a two-tail test and 1.69 for a one-tail test.

Exhibit 4: Emerging Market Autoregressive Model

Lag	Autocorrelation
1	0.0829
2	0.1293
3	0.0227
4	0.1882

Sims is investigating the performance of 5-year European and British bonds based on the actions of the U.S. Federal Reserve. He uses the U.S. Federal Funds rate. The two regressions he uses are:

$$BY_{E,t} = b_0 + b_1FF_{US,t}$$

$$BY_{B,t} = b_0 + b_1FF_{US,t}$$

where: FF is the Federal Funds rate in the United States (US), and BY is the bond yield in the European Union (E) and Great Britain (B).

Before he runs this regression, he investigates the characteristics of the dependent and independent variables. He finds that the Federal Funds rate in the United States and the bond yield in Great Britain have a unit root but that the bond yield in the European Union does not. Furthermore, the Federal Funds rate in the United States and the bond yield in Great Britain are cointegrated, but the Federal Funds rate in the United States and the bond yield in the European Union are not.

Question #7 of 60

Question ID: 1220749

Which of the following models would be the *best* formulation for the Canadian retail sales data?

A) $X_t = b_0 + b_1X_{t-1}$.

B) $X_t = b_1X_{t-1} + b_2X_{t-12}$.

C) $\mathbf{X_t = b_0 + b_1X_{t-1} + b_2X_{t-12}}$.

Explanation

The best formulation for Smith's retail sales data would include the intercept, the lag 1 coefficient, and the lag 12 coefficient. First, note that in the second regression, all of these are statistically significant, with a p-value of less than 1%. Also, the second regression that included the lag 12 term has a higher adjusted R-square at 0.92 compared to 0.83 in the first regression that omits the lag 12 term. Lastly, we should suspect that the lag 12 term is appropriate because this is seasonal, monthly data.

We could have also looked at the significance of the autocorrelations if they had been provided. If any are significant in either regression, another lag term would be added to the autoregressive model.

For Further Reference:

(Study Session 2, Module 6.2, LOS 6.d, 6.l)

Question #8 of 60

Question ID: 1220750

The estimate of forecasted sales for the United States this month, using Sims's model, is *closest* to:

A) $6,329.

B) $6,453.

C) **$6,667.**

Explanation

To forecast the sales this month, we first calculate the change in the log of sales last month:

$$\Delta \ln \text{sales}_{t-1} = \ln(6{,}270) - \ln(6{,}184) = 8.7435 - 8.7297 = 0.0138$$

Next, use this change in the regression model to obtain the forecasted change for this month:

$$\Delta \ln \text{sales}_t = 0.052 + 0.684(0.0138) = 0.0614$$

Add the forecasted change to last month's log sales to obtain this month's forecasted log sales:

$$\ln \text{sales}_t = 0.0614 + 8.7435 = 8.8049$$

Lastly, convert the forecasted log value to a dollar value by taking its antilog:

$$\text{sales}_t = e^{8.8049} = \$6{,}667$$

For Further Reference:

(Study Session 2, Module 6.2, LOS 6.d)

Question #9 of 60

Question ID: 1220751

Are the comments of Smith and Sims on the construction of an ARCH model correct?

A) Both comments are correct.

B) **Only Smith is correct.**

C) Only Sims is correct.

Explanation

Smith is correct. The first step in testing for an ARCH process is to take the residuals from the original autoregressive model and then square them.

Sims is incorrect. The next step in determining whether an ARCH process exists is to regress the squared residuals from this period against the squared residuals from the previous period as follows:

$$\varepsilon_t^2 = b_0 + b_1 \varepsilon_{t-1}^2$$

If b_1 is statistically different from zero, then we conclude that the regression model contains an ARCH process.

For Further Reference:

(Study Session 2, Module 6.5, LOS 6.m)

Question #10 of 60

Question ID: 1220752

Regarding Smith's emerging market regression, should lag 2 and lag 4 terms be included in the regression?

A) **Neither lag should be included.**

B) Only lag 2 should be included.

C) Only lag 4 should be included.

Explanation

Neither the lag 2 term nor the lag 4 term should be included. To determine the significance of the autocorrelation of the residuals, we need the standard error, which is calculated as one over the square root of the number of observations. There are 36 quarters of inflation data. One quarter is lost because we have a lag 1 term, so there are 35 observations in the regression. Therefore, the standard error is $\frac{1}{\sqrt{35}} = 0.1690.$

The *t*-statistics are the autocorrelations divided by the standard error which results in:

Lag	Autocorrelation	Standard Error	t-Statistic
1	0.0829	0.1690	0.49
2	0.1293	0.1690	0.76
3	0.0227	0.1690	0.13
4	0.1882	0.1690	1.11

The critical *t*-value is 2.03 for a two-tail test, so none of the *t*-statistics indicate that the autocorrelations are significantly different from zero. Therefore, we do not need to include additional lag terms.

For Further Reference:

(Study Session 2, Module 6.2, LOS 6.d)

Question #11 of 60

Question ID: 1220753

Will Sims's regressions of European and British bond yields on the U.S. Federal Funds rate produce valid results?

A) Neither Regression is valid.

B) Only Regression 1 is valid.

C) **Only Regression 2 is valid.**

Explanation

In the first regression, the Federal Funds rate in the United States has a unit root, but the bond yield in the European Union does not. So the former data series is not covariance stationary, but the latter is. In this case, the regression results will not be valid.

In the second regression, both the Federal Funds rate in the United States and the bond yield in Great Britain have a unit root. So both data series are not covariance stationary. However, because they are cointegrated, the regression results will be valid.

To sum up the possibilities you may face on exam day:

- If neither data series has a unit root, the regression results are valid.
- If only one data series has a unit root, the regression results are invalid.
- If both data series have a unit root and they are cointegrated, the regression results are valid.
- If both data series have a unit root and they are not cointegrated, the regression results are not valid.

For Further Reference:

(Study Session 2, Module 6.5, LOS 6.k, 6.n)

Question #12 of 60

Question ID: 1220754

Which of the following is the *appropriate* test for cointegration?

A) Breusch-Pagan.

B) Durbin-Watson.

C) **Engle-Granger.**

Explanation

To test whether two variables are cointegrated, we regress one data series on the other and examine the residuals for a unit root using the Dickey-Fuller/Engle-Granger test. If we reject the null hypothesis, the error terms of the two data series are covariance stationary and cointegrated. The regression results will be valid.

For Further Reference:

(Study Session 2, Module 6.5, LOS 6.n)

Questions #13-18 of 60

Questions 73 through 78 relate to Economics.

Platinum Advisors Case Scenario

Frank Hoskins and Paul Lanning are economists for a large U.S. investment advisory firm, Platinum Advisors. Hoskins and Lanning use their independent research on U.S. stocks and international stocks to provide advice for the firm's network of advisors. As the senior economist at Platinum, Hoskins is a partner in the firm and is Lanning's supervisor. Lanning has worked for Platinum for four years. At a lunch meeting, the two economists discuss the usefulness of economic theory, economic data, and the resulting forecasts of the global economic and stock market activity.

Hoskins is investigating the growth prospects of the country of Maldavia. Maldavia is a formerly communist country with a population of 3 million located in Eastern Europe. The Maldavian government had been aggressive in instituting political reform and encouraging the growth of financial markets. However, due to recent increases in stock market volatility, the Maldavian government is considering reigning-in trading volume by imposing a tax on stock market transactions. Hoskins states that this development is not encouraging for future economic growth.

Lanning is examining the country of Petra. Petra is a country of 25 million located in South America and rich with natural resources, including oil. The recently-elected president of Petra, Carlos Basile, has announced that he would like to ensure that the citizens of Petra enjoy the benefits of its natural resources rather than foreign oil companies, and that the government will nationalize these oil companies. Lanning states that these changes would not be beneficial for the future growth of the Petrian economy.

One of the many items they study when examining an economy or stock market is the economic information released by governments and private organizations. Hoskins and Lanning use this information to adjust their economic growth forecasts and to accordingly adjust portfolio allocations to the bond and stock markets. Examining information for Maldavia, Hoskins has learned that the Maldavian private sector has embarked on an ambitious plan to increase labor productivity by purchasing more machinery for its factories. Plotting the productivity curve for Maldavia, Hoskins states that labor productivity should increase because the productivity curve will shift up.

Lanning is examining the historical record of economic growth in Petra. He has gathered the data in Exhibit 1 to determine potential economic growth.

Exhibit 1: Economic Data for Petra from 20X1 to 20X7

Real GDP growth rate	3.9%
Growth rate in capital	1.4%
Growth rate in labor force	1.9%
Labor cost/total factor cost	0.52

Lanning then turns his attention to the countries of Alicia and Felicia. He notes that the GDP growth rate in both countries is comparable. Alicia's capital to labor ratio is USD 5,000. Felicia's capital to labor ratio is USD 2,800. Alicia has a relatively younger labor force and the labor cost represents 35% of total factor cost. Both countries have extensive restrictions on foreign direct investments in their economy.

It has long been Platinum's policy for its economists to use long-term economic growth trends to forecast future economic growth, stock returns, and dividends in a country. Lanning also examines the economy of Tiberia. Tiberia has a population of 11 million and is located in northern Africa. Its economy is diversified, and its main exports are agricultural products and heavy machinery. The country's economy has been growing at an annual rate of 6.2% for the past 10 years, in part because of technological advances in the manufacturing of heavy equipment. These advances involve the use of computer-operated welding machines that have made the manufacturing process more efficient. Lanning is worried, however, that the current GDP growth rate may not be sustainable and is considering advising Platinum's portfolio managers to decrease their portfolio allocations to the country. Before doing so, he will consult with Hoskins.

Question #13 of 60

Question ID: 1220756

Are the statements made by Hoskins and Lanning regarding the future growth of the Maldavian and Petrian economies *most likely* to be correct or incorrect?

A) **Both are correct.**
B) Only Hoskins is correct.
C) Only Lanning is correct.

Explanation

Hoskins's statement is likely to be correct. If the Maldavian government is considering taxing stock market transactions, then this will limit future economic growth. Economic growth is dependent in part on markets, because markets facilitate business transactions between buyers and sellers.

Lanning's statement is also likely to be correct. If the president of Petria nationalizes the oil industry, then private property will be seized and property rights will not have been respected. Without property rights, firms and individuals have little incentive to make investments that could lead to future economic growth.

For Further Reference:

(Study Session 4, Module 11.1, LOS 11.a)

Question #14 of 60

Question ID: 1220757

Hoskins's statement regarding Maldavian labor productivity and its productivity curve is:

A) incorrect, because labor productivity is not affected in this scenario.
B) incorrect, because labor productivity will decrease because of the low skill level of the labor force.
C) **incorrect, because although labor productivity will increase, the increase will result from a movement along the productivity curve.**

Explanation

Hoskins's reasoning is incorrect because although labor productivity will increase, the increase will result from a movement *along* the productivity curve. An upward shift in the productivity curve requires an advancement in technology.

For Further Reference:

(Study Session 4, Module 11.1, LOS 11.d)

Question #15 of 60

Question ID: 1220758

Which country will experience a higher growth rate in potential GDP due to capital deepening and due to removal of restrictions on inflow of foreign capital?

	Capital deepening	Removal of restrictions on inflow of capital
A)	Alicia	Felicia
B)	**Felicia**	**Felicia**
C)	Felicia	Alicia

Explanation

Felicia has lower capital to labor ratio and would benefit more from capital deepening. Removal of restrictions on the inflow of capital would lead to more investment and hence capital deepening—again benefiting Felicia more.

For Further Reference:

(Study Session 4, Module 11.1, LOS 11.d)

Question #16 of 60

Question ID: 1220759

Petra's GDP growth rate attributable to growth in total factor productivity is *closest* to:

A) 0.6%.
B) 1.6%.
C) **2.2%.**

Explanation

GDP growth rate = growth rate in TFP + α (long-term growth rate of capital) + $(1 - \alpha)$ (long-term growth rate of labor).

$(1 - \alpha) = 0.52$ and thus $\alpha = 0.48$

$3.9\% = \Delta TFP + (0.48)(1.4) + (0.52)(1.9) \rightarrow \Delta TFP = 2.24\%$

For Further Reference:

(Study Session 4, Module 11.2, LOS 11.e)

Question #17 of 60

Question ID: 1220760

The classical growth theory predicts that Tiberia's long-run future GDP per capita is *most likely* to:

A) decline due to diminishing marginal productivity of capital.
B) **settle at subsistence level due to adjustments in the population.**

C) remain unchanged from the current levels unless the government increases the budget deficit.

Explanation

Under the classical growth theory, the Tiberian economy will settle at a subsistence level. The high growth in the economy will result in a higher population. The higher population will eventually result in decreased returns to labor and decreased labor productivity. No permanent increase in labor productivity will result and per capita GDP will settle at a subsistence level.

For Further Reference:

(Study Session 4, Module 11.3, LOS 11.i)

Question #18 of 60

Question ID: 1220761

The endogenous growth theory predicts that the Tiberian GDP growth rate is *most likely* to:

A) settle at a long-run steady state because of diminishing marginal productivity of capital.

B) **continue to increase because technological advances will be shared by many sectors of the economy.**

C) decline because the current GDP growth rate is not sustainable.

Explanation

Under the endogenous growth theory, the Tiberian GDP growth rate can continue to increase because technological advances will be shared by many sectors of the economy. Increasing R&D investment, for example, results in benefits not just to the firm making the investment but also to other firms. As these benefits flow to other firms, the economy becomes more productive and the long-term economic growth rate can continue to increase.

For Further Reference:

(Study Session 4, Module 11.3, LOS 11.i)

Questions #19-24 of 60

Questions 79 through 84 relate to Financial Reporting and Analysis.

Galena Petrovich Case Scenario

Galena Petrovich, CFA, is an analyst in the New York office of TRS Investment Management, Inc. Petrovich is an expert in the industrial electrical equipment sector and is analyzing Fisher Global. Fisher is a global market leader in designing, manufacturing, marketing, and servicing electrical systems and components, including fluid power systems and automotive engine air management systems.

Fisher has generated double-digit growth over the past 10 years, primarily as the result of acquisitions, and has reported positive net income in each year. Fisher reports its financial results using International Financial Reporting Standards

(IFRS).

Petrovich is particularly interested in a transaction that occurred several years ago, before the change in accounting standards, in which Fisher used the pooling method to account for a large acquisition of Dartmouth Industries, an industry competitor. She would like to determine the effect of using the purchase method instead of the pooling method on the financial statements of Fisher. Fisher exchanged common stock for all of the outstanding shares of Dartmouth.

Fisher also has a 50% ownership interest in a joint venture with its major distributor, a U.S. company called Hydro Distribution. She determines that Fisher has reported its ownership interest under the equity method, and that the joint venture has been profitable since it was established three years ago. She decides to adjust the financial statements to show how the financial statements would be affected if Fisher had reported its ownership under the acquisition method. Fisher is also considering acquiring 80% to 100% of Brown and Sons Company. Petrovich must consider the effect of such an acquisition on Fisher's financial statements.

Petrovich determines from the financial statement footnotes that Fisher had an unrealized gain related to debt securities that are classified as fair value through OCI. Competitor firms classify similar debt securities as fair value through profit or loss.

Finally, Petrovich finds a reference in Fisher's footnotes regarding a special purpose entity (SPE). Fisher has reported its investment in the SPE using the equity method, but Petrovich believes that the consolidation method more accurately reflects Fisher's true financial position, so she makes the appropriate adjustments to the financial statements.

Question #19 of 60

Question ID: 1220763

Regarding the prior purchase that was accounted for under the pooling of interests method, had Fisher Global reported this purchase under the acquisition method:

A) the assets and liabilities of the purchased firm would not be included on Fisher’s balance sheet.

B) **balance sheet assets and liabilities of the purchased firm would have been reported at fair value.**

C) reported goodwill could be less depending on the fair value of the identifiable assets and liabilities compared to their book values.

Explanation

The assets and liabilities of the purchased firm are included on the balance sheet of the acquiring firm under either method. Under the pooling method, there is no adjustment of balance sheet asset and liability values to their fair values. Under the acquisition method, assets and liabilities acquired are reported at fair value at the time of the purchase. There is no goodwill reported under the pooling method; the purchase price is not reflected on the balance sheet of the acquiring firm.

For Further Reference:

(Study Session 5, Module 13.7, LOS 13.a)

Question #20 of 60

Question ID: 1220764

Had Fisher Global reported its investment in the joint venture under the acquisition method rather than under the equity method, it is *most likely* that:

A) reported revenue would have been the same.

B) reported expenses would have been lower.

C) **net income would not have been affected.**

Explanation

Under the acquisition method, the investee firm's revenue and expenses would be reported on Fisher's income statement, increasing both expenses and revenues. Under the equity method, Fisher's revenue and expenses are reported without adjustment, and the proportion of income from the purchased firm is reported separately, so that net income is the same under either method.

For Further Reference:

(Study Session 5, Module 13.4, LOS 13.a)

Question #21 of 60

Question ID: 1220765

Regarding any potential goodwill on the acquisition of Brown and Sons being considered by Fisher Global, which of the following statements is *most accurate*? The goodwill will be reported as an asset and:

A) must be reviewed for impairment at least annually, with different test for impairment under IFRS and U.S. GAAP. Impairment losses can be reversed under U.S. GAAP but not under IFRS.

B) amortized, and must be reviewed for impairment at least annually, though impairment losses cannot be reversed under either GAAP or IFRS.

C) **must be reviewed for impairment at least annually with different tests for impairment under IFRS and U.S. GAAP. The losses on impairment cannot be reversed under either U.S. GAAP or under IFRS.**

Explanation

Goodwill is not amortized under IFRS or U.S. GAAP. The test for impairment is different under IFRS than under U.S. GAAP. Impairment losses cannot be reversed under U.S. GAAP nor under IFRS.

For Further Reference:

(Study Session 5, Module 13.7, LOS 13.b)

Question #22 of 60

Question ID: 1220766

If Fisher Global decides to purchase only 80% of Brown and Sons, under IFRS they will have the option to:

A) report the acquisition as either a business combination or as an acquisition.

B) value the identifiable assets and liabilities of Brown and Sons at their current book values or at fair market value.

C) report more or less goodwill depending on the accounting method they choose.

Explanation

All business combinations (e.g., merger, purchase, or consolidation) are reported under the acquisition method. Identifiable assets and liabilities must be reported at fair value at the time of the acquisition. Under IFRS, Fisher has the option of calculating the goodwill for the acquisition under either the full goodwill or partial goodwill methods. Goodwill is less under the partial goodwill method.

For Further Reference:

(Study Session 5, Module 13.7, LOS 13.b)

Question #23 of 60

Question ID: 1220767

For comparison purposes, Petrovich decides to reclassify Fisher Global's debt securities as fair value through profit or loss. Ignoring any effect on income taxes, which of the following *best* describes the effects of the necessary adjustments?

A) Net income is higher and asset turnover is higher.

B) Return on assets is lower and debt-to-equity is lower.

C) Return on equity is higher and debt-to-total capital is not affected.

Explanation

Both FVOCI and FVPL classifications report the security at fair value on the balance sheet, and hence, total assets (and asset turnover) would be unchanged. You are given that the debt securities had an unrealized gain, which, under FVPL classification, would be reported in an income statement, resulting in a higher net income (as opposed to FVOCI classification where the unrealized gain is reported in OCI). Stockholders' equity would be the same under either classification, and hence, debt-to-total capital will be unchanged. Because of higher net income, an FVPL classification would result in a higher ROA and ROE as compared to FVOCI classification.

For Further Reference:

(Study Session 5, Module 13.1, LOS 13.a)

Question #24 of 60

Question ID: 1220768

What are the *most likely* effects on return on assets (ROA) and net profit margin (ignoring any tax effects) of correctly adjusting for Fisher Global's investment in the SPE using the acquisition method?

	ROA	Net profit margin
A)	No change	Decrease
B)	Decrease	No change
C)	**Decrease**	**Decrease**

Explanation

The acquisition method results in higher assets and higher sales, but the same net income. Therefore, both ROA (net income divided by assets) and net profit margin (net income divided by sales) will decrease.

For Further Reference:

(Study Session 5, Module 13.4, LOS 13.c)

Questions #25-30 of 60

Questions 85 through 90 relate to Financial Reporting and Analysis.

John Baragutti Case Scenario

John Baragutti, CFA, works in the transaction services arm of HLBB, a large accountancy firm with a substantial advisory business on the east coast of the United States. He is currently advising on a potential M&A transaction between two airlines. Tarpon Airlines, Inc. (Tarpon), which operates out of the east coast of the United States, is the larger of the two companies and its board has entered into discussions with the smaller Clear Air S.A. (Clear). Clear, based in France, would provide Tarpon access to a significant number of landing slots in major European airports.

Baragutti is currently reviewing the income statement of Clear in order to address some concerns raised by Tarpon's board. Merger discussions had initially progressed rapidly after an initial review of Clear's last five years' income statements, which revealed an operating profit margin that was in line with that of Tarpon. The board has historically been extremely cautious about acquiring any potential target with a profit margin lower than its own. However, further investigation has revealed concerns regarding the treatment of pension costs in the income statement.

Tarpon runs only a defined contribution pension scheme for its employees and an employee incentive stock option scheme. Clear, however, has a defined benefit scheme that is currently overfunded. Extracts from the pension note included in Clear's annual report are shown in Exhibit 1.

Exhibit 1: Pension Note (Extracts)

Present Value of Defined Benefit Obligations		Fair Value of Plan Assets	
	€ million		**€ million**
As at 1 January 2015	8,110	As at 1 January 2015	8,920
Current service cost	170	Return on plan assets	145
Past service cost	15	Employer contributions	306
Interest cost	365	Benefits paid	(202)
Benefits paid	(202)		
Remeasurement (gains)/loss	218		

As at 31 December 2015	8,676	As at 31 December 2015	9,169

Notes:

- Pension benefit obligation has been calculated using the average yield on high-quality corporate bonds with similar durations to the benefits in the scheme, currently 4.5%.
- Due to turbulent economic conditions in the eurozone, return on plan assets was only 1.63%.
- Remeasurement gains at the start of the year totaled €231 million.

Having never accounted for a defined benefit scheme, in its initial review, the board of Tarpon did not consider the impact of the defined benefit plan on the operating margin. As a result, Baragutti has been asked to address three issues.

First, Clear prepares its financial statements using IFRS whereas Tarpon reports under U.S. GAAP. The board wants to gain an understanding of Clear's pension expense for 2015 as computed under U.S. GAAP. Secondly, the disclosure of certain elements of the pension cost has confused the board. Although the notes to the income statement identify that the pension cost has an interest element, this has been included within operating profit.

Finally, the board is concerned about future adjustments that may be required to deal with the amortization of the remeasurement gains that have accumulated in Clear's pension scheme. Baragutti intends to perform the following calculations to deal with each issue independently:

Issue 1

Recalculate pension expense included in the income statement under U.S. GAAP. Baragutti has observed that companies reporting pension expense under U.S. GAAP have used an average of 3% for the expected return on plan assets and he intends to apply this rate where applicable. He does not intend to amortize any of this year's prior service cost.

Issue 2

Assuming IFRS, recalculate the local currency (€) operating margin excluding any pension scheme interest element. The current income statement before Baragutti's adjustments is shown in Exhibit 2.

Issue 3

Baragutti prepares the following note containing two statements to advise the board on the future amortization of actuarial gains and losses:

Statement 1

> "Under IFRS, when cumulative remeasurement gains/losses are large enough, they will be amortized through the income statement over the average service life of the employees, reducing net income if net losses are amortized, and increasing net income if net gains are amortized."

Statement 2

> "Under U.S. GAAP, the amortization of net actuarial losses will increase leverage (i.e., debt-to-equity ratio), whereas the amortization of net actuarial gains will decrease leverage."

Exhibit 2: Income Statement (Extracts)

	2015
	€ million

Revenue	
Passenger	9,321
Cargo	456
Total	**9,777**
Employee costs	3,654
Depreciation, amortization	894
Aircraft operating lease costs	156
Fuel and oil costs	1,853
Engineering and other aircraft costs	542
Landing fees	1,458
Exchange rate losses	221
Ground equipment costs	765
Total operating costs	**9,543**
Operating profit	**234**
Fuel derivative losses	32
Finance costs	193
Finance income	89
Profit before tax	**98**

Note: Employee costs include the defined benefit pension expense for the period.

Baragutti has also been asked to raise any other points he thinks the board should be aware of surrounding this issue. He intends make the following two observations on cash flow calculations and the impact of Tarpon's employee share option scheme.

Cash Flow Calculations

Baragutti noted that the board has used Clear's operating cash flow as a basis for its valuation of the entity. He intends to notify the board that whenever it encounters a company with a defined benefit scheme, in his opinion, it would be advisable to adjust CFO to reflect the fact that employer contributions are not the same as the cost of the scheme.

Employee Share Option Scheme

Although Tarpon does not have a defined benefit pension scheme, it does have an equivalent employee compensation expense in the form of an employee share option scheme. Just as there is a cost to Clear of its defined benefit scheme, the cost of Tarpon's share option scheme will be charged as an expense to the income statement and hence reduce retained earnings and equity.

Question #25 of 60

Question ID: 1220770

The total periodic pension cost for Clear's defined benefit pension scheme in 2015 is *closest* to:

- **A)** €405 million.
- **B)** €421 million.
- **C)** **€623 million.**

Explanation

Employer contributions	306
Opening funded status	810
Closing funded status	493
Change in funded status	(317)
TPPC = contributions − Δ funded status	€623

For Further Reference:

(Study Session 5, Module 14.3, LOS 14.c)

Question #26 of 60

Question ID: 1220771

In dealing with issue 1 as outlined, Baragutti is likely to calculate a pension expense *closest* to:

- **A)** €149 million.
- **B)** **€267 million.**
- **C)** €390 million.

Explanation

Income statement (U.S. GAAP)

Service cost		170
(+) Interest cost	(4.5%)	365
(−) Expected return on assets	(3%)	(268)
(=) Periodic pension cost in P&L		267

Since beginning actuarial losses were less than 10% of the greater of beginning PBO or beginning plan assets, there would be no amortization.

For Further Reference:

(Study Session 5, Module 14.3, LOS 14.c)

Question #27 of 60

Question ID: 1220772

Using IFRS and Baragutti's suggested adjustments for issue 2, he is likely to calculate an adjusted operating margin *closest* to:

A) **2%.**
B) 4%.
C) 6%.

Explanation

Under IFRS interest income/expense is calculated by applying the discount rate to the opening funded status. Since the plan is overfunded, Clear is reporting net interest income.

Opening funded status:	8920 − 8110 = 810
Net interest income:	810 × 0.045 = 36.45
Operating profit as reported:	234
Less net interest income:	(36.45)
Adjusted operating profit:	197.55
Adjusted margin:	197.55/9777 = 2.02%

For Further Reference:

(Study Session 5, Module 14.6, LOS 14.e)

Question #28 of 60

Question ID: 1220773

Baragutti is *most likely* to suggest adjusting the cash flow used by the board as a basis of its valuation by:

A) decreasing it because employer contributions are higher than reported pension expense.
B) **decreasing it because employer contributions are lower than total periodic pension cost.**
C) increasing it.

Explanation

If the employer contributions are lower than the total periodic pension cost, the company is effectively borrowing from the pension plan. The after-tax difference should be deducted from CFO and added to CFF.

For Further Reference:

(Study Session 5, Module 14.6, LOS 14.f)

Question #29 of 60

Question ID: 1220774

Which of Baragutti's statements on the amortization of actuarial gains and losses in response to issue 3 are *most likely* correct?

A) Both statements are correct.

B) Only statement two is correct.

C) **Neither statement is correct.**

Explanation

Under IFRS, Remeasurement gains/losses are never amortized into the income statement, they remain in other comprehensive income.

Under U.S. GAAP actuarial gains and losses are amortized using the corridor approach. Amortization removes a gain or loss from OCI and shows it in the income statement. Therefore it has no overall impact on equity.

For Further Reference:

(Study Session 5, Module 14.3, LOS 14.c)

Question #30 of 60

Question ID: 1220775

Baragutti's comments regarding Tarpon's employee share option scheme are *most likely*:

A) correct.

B) incorrect because the cost of issuing shares under an employee stock option scheme will be taken directly to equity via OCI and hence not reduce retained earnings.

C) **incorrect as the cost of issuing shares under an employee stock option scheme will not reduce equity.**

Explanation

The expense of the employee stock option scheme will be shown as employee compensation expense in the income statement and hence reduce retained earnings. However, there is an offsetting increase in paid-in capital and hence no overall impact on equity.

For Further Reference:

(Study Session 5, Module 14.7, LOS 14.h)

Questions #31-36 of 60

Questions 91 through 96 relate to Corporate Finance.

Cummings Enterprises, Inc., Case Scenario

Cummings Enterprises, Inc. (CEI), is a U.S. conglomerate that operates in a variety of markets. CEI's marginal tax rate is 40%. One of CEI's divisions manufactures small fiberglass products, such as bird baths and outdoor storage lockers. CEI is currently considering the expansion of its fiberglass product line to include booms and buckets for aerial lift trucks (often called cherry pickers), which are used for applications such as high voltage power line maintenance. The addition of this new product line is expected to increase CEI's sales by $750,000 per year.

Cal Holbrook, CEI's manager of fiberglass operations, is deciding whether to purchase a robotic system to produce cherry picker booms and buckets. The price of the robotic system will be $700,000, plus an additional $100,000 for shipping, site preparation, and installation. The new equipment will require a $50,000 increase in inventory and a $20,000 increase in accounts payable. The company uses MACRS to calculate depreciation for tax purposes and the straight-line method for financial reporting. The project has an expected life of four years, at which time the robot is expected to be sold for $75,000. The project will be funded with the debt/equity mix reflected by the company's current capital structure. CEI's pretax cost of new debt is 7%. Assume a WACC of 8%. Some of the relevant end-of-year cash flows for the robotic project are presented in Exhibit 1.

Exhibit 1: Relevant Cash Flows for Robotics Project

	Year 1	Year 2	Year 3	Year 4
Sales	$750,000	$750,000	$750,000	$750,000
Variable costs	$225,000	$225,000	$225,000	$225,000
Fixed expense	$75,000	$75,000	$75,000	$75,000
Depreciation	$264,000	$360,000	$120,000	$56,000
Earnings before tax (EBT)	$186,000	$90,000	$330,000	$394,000
Total after-tax cash flow	**$375,600**	**$414,000**	**$318,000**	?

Holbrook calculates the NPV of the robotic project and presents his findings to his supervisor, Geoffrey Mans. After reviewing the report, Mans makes the following recommendations:

1. "You forgot to include the $100,000 we have spent so far on consultants and project engineers and who knows what else to evaluate the project's feasibility. Rerun the numbers including that amount and get the revised calculations to me this afternoon."
2. "Rerun the analysis assuming straight-line depreciation for tax purposes. The NPV will be higher, and we'll be more likely to get the project funded."

Cummings has two other projects under consideration that would affect the production of storage lockers. Project 1 relates to changing the production process, and Project 2 relates to expanding the distribution facility. Holbrook estimates the NPV of the expected cash flows for Project 1 at negative $7 million. An additional investment of $3 million would allow management to more rapidly adjust to the demand for a certain type of locker. The value of this flexibility is estimated at $9 million. He estimates that the NPV of the expected cash flows for Project 2 at $3 million. An expansion option would require an additional investment of $2 million. At this time, Cummings does not have any capital rationing restrictions.

Holbrook emails the lead analyst for the budgeting group and indicates that he cannot make a decision on Project 2 without knowing the value the expansion option will provide.

Holbrook calls a capital budgeting meeting with CEI's production and quality control manager. Holbrook opens the meeting by stating: "I think we should accept this project based solely on the fact that it provides great operating margins. Nevertheless, I think we should conduct net present value (NPV) analysis to confirm my opinion." Holbrook then receives the following comments:

Comment 1:	It is important that interest is included in the cash flows used with NPV analysis because interest is a real and very significant expense.
Comment 2:	If applied correctly, the NPV of this project will be higher if we discount economic profits instead

of net after-tax operating cash flows in our analysis. I suggest we calculate economic profit as net operating profit after tax minus the dollar cost of capital.

Question #31 of 60

Question ID: 1220777

Which of the following choices is *closest* to the Year 4 total cash flow for the robotics project in Exhibit 1?

A) $292,400.
B) $345,400.
C) **$367,400.**

Explanation

initial investment outlay

= purchase price + increase in net working capital + shipping and installation costs

= $700,000 + ($50,000 − $20,000) + $100,000 = $830,000

terminal year after-tax non-operating cash flow (TNOCF)

= $Sal_T + NWCInv - T(Sal_T - B_T)$

= 75,000 + 30,000 − 0.4(75,000 − 0)

= 75,000

after-tax operating cash flow (Year 4)

= (S − C)(1 − T) + DT

= ($750,000 − $225,000 − $75,000)(1 − 0.4) + (0.4)($56,000) = $292,400

The book value at the end of Year 4 is $0 because total depreciation over the four years was $800,000.

total CF (Year 4) = $292,400 + $75,000 = $367,400

For Further Reference:

(Study Session 7, Module 19.1, LOS 19.a)

Question #32 of 60

Question ID: 1220778

Are Mans's recommendations regarding the robotic project correct or incorrect?

A) Both recommendations are correct.
B) Only one of the recommendations is correct.
C) **Both recommendations are incorrect.**

Explanation

Both recommendations are incorrect. The $100,000 is a sunk cost and is thus not a relevant cash flow. Using straight-line depreciation will reduce the present value of the depreciation tax shield and reduce the NPV.

For Further Reference:

(Study Session 7, Module 19.1, LOS 19.a)

Question #33 of 60

Question ID: 1220779

For this question only, assume that the investment in net working capital of $30,000 at the project inception is an inflow and that the amount nets to zero with the outflow that will occur at the end of the project. However, Holbrook does not include a cash flow for net working capital at the beginning or the end of the project. Assuming he correctly analyzes all the other components of the project, has Holbrook correctly estimated the project's net present value?

A) Yes.
B) **No, he underestimated the project’s NPV by approximately $7,950.**
C) No, he underestimated the project’s NPV by approximately $2,222.

Explanation

By ignoring the initial $30,000 cash inflow (recall that you are asked to assume it is an inflow), he has underestimated project NPV by $30,000. By ignoring the terminal cash outflow of $30,000, he has overestimated the project NPV by

$$\frac{\$30{,}000}{1.08^4} = \$22{,}050$$

The net effect is to underestimate NPV by $30,000 − 22,050 = $7,950.

For Further Reference:

(Study Session 7, Module 19.1, LOS 19.a)

Question #34 of 60

Question ID: 1220780

Which of the following choices is *closest* to the overall NPV for Project 1, and is Holbrook correct to wait for more information before deciding on Project 2?

A) The overall NPV is –$1 million, and Holbrook is correct.
B) **The overall NPV is –$1 million, and Holbrook is incorrect.**
C) The overall NPV is $13 million, and Holbrook is incorrect.

Explanation

The overall NPV of Project 1 = project NPV − option cost + option value.

overall NPV = –$7 million − $3 million + $9 million = –$1 million

Without the option, the NPV of the production facility is negative, and the real option does not add enough value to make the overall project profitable.

Holbrook is incorrect that he needs to wait for more information to make the decision on Project 2. If the NPV of the project without the option is positive, the analyst knows that the project with the option must be even more valuable, and determining a specific value for the option is unnecessary. A real option adds value to a project, even if it is difficult to determine the monetary amount of that value.

For Further Reference:

(Study Session 7, Module 19.3, LOS 19.f)

Question #35 of 60

Question ID: 1220781

The economic income for Year 3 for the robotics project from Exhibit 1 is *closest* to:

A) $19,400.

B) **$48,700.**

C) $49,400.

Explanation

economic income = cash flow − economic depreciation

economic depreciation = beginning market value − ending market value

market value at time t = present value of all remaining cash flows discounted at the WACC

$$\text{Year 3 beginning market value} = \frac{\text{CF}_3}{(1+\text{WACC})^1} + \frac{\text{CF}_4}{(1+\text{WACC})^2}$$

$$= \frac{\$318{,}000}{(1.08)^1} + \frac{\$367{,}400}{(1.08)^2} = \$294{,}444 + \$314{,}986 = \$609{,}430$$

$$\text{Year 3 ending market value} = \frac{\text{CF}_4}{(1+\text{WACC})^1} = \frac{\$367{,}400}{(1.08)^1} = \$340{,}185$$

Year 3 after-tax operating cash flow (given) = $318,000

Year 3 economic depreciation = $609,430 − $340,185 = $269,245

Year 3 economic income = $318,000 − $269,245 = $48,755

For Further Reference:

(Study Session 7, Module 19.3, LOS 19.h)

Question #36 of 60

Question ID: 1220782

Are the comments made by the CEI's production and quality assurance manager correct or incorrect?

A) Both comments are correct.

B) Only one of the comments is correct.

C) **Both comments are incorrect.**

Explanation

Comment 1 is incorrect. Interest should not be included in a project's cash flows when conducting NPV analysis because it is a financing cost that is reflected in the discount rate use to compute NPV.

Comment 2 is incorrect. In theory, when discounted at the WACC, the present value of the economic profits from a project equals the NPV of the project. For a given period, economic profit = NOPAT − $WACC, where NOPAT is net operating profit after taxes and $WACC is the dollar cost of the capital used during the period. Economic profit reflects the income earned by all capital providers.

For Further Reference:

(Study Session 7, Module 19.3, LOS 19.i)

Questions #37-42 of 60

Questions 97 through 102 relate to Fixed Income.

Jon Stevenson Case Scenario

Jon Stevenson, CFA, is an experienced equity fund manager who has recently taken a position with Lohsi Clearview, a UK-based hedge fund that has combined a wide range of strategies to deliver impressive returns over the last five years. One of the fund's strategies is to invest in high-credit-risk fixed income instruments. The fund has an excellent track record of identifying bonds in this sector that subsequently outperform the market.

Stevenson wishes to familiarize himself with the fund's strategies and has started by looking at some of the techniques used in analyzing fixed income instruments. Exhibit 1 shows the firm's approach to analyzing credit risk.

Exhibit 1: Credit Analysis Tools

Credit Ratings
Before undertaking any level of detailed analysis, the credit rating from the three major agencies should be obtained. Typically an instrument that is investment grade according to all three agencies will not be worthy of further consideration.
Structural Models
An initial analysis using a simple structural model should be undertaken to calculate the present value of the expected loss.
Reduced Form Models
Detailed analysis should be undertaken using the reduced form models used by the fixed income team. This analysis should only be undertaken once the structural model analysis has been completed.

Stevenson has no experience with structural models and is interested in learning more. He finds an analysis that has been completed for a recent bond issue. The results are shown in Exhibit 2.

Exhibit 2: IMC Bond Issue (ID 062014555612) Structural Model Results

Asset value	A_t	1,200

Expected return on assets	μ	0.04
Risk free rate	r	0.02
Face value	K	850
Time to maturity	T−t	1.5
Return volatility	σ	0.28

d_1	1.26452
d_2	0.92159
$N(–d_1)$	0.1030
$N(–d_2)$	0.1784
e_1	1.35200
e_2	1.00907
$N(–e_1)$	0.0882
$N(–e_2)$	0.1565
Expected loss	22.86
PV expected loss	23.51

Stevenson next turns his attention to DEP Bond, one of the fund's holdings. The bond was purchased today, immediately after it paid its annual coupon. Stevenson obtains the file for DEP and finds out that the bond was evaluated using a risk-neutral probability of default (POD) as shown in Exhibit 3.

Exhibit 3: DEP Bond Issue (ID 071443274112)

Rating	B	Modified duration	2.80	POD	2.50%
Purchase price	$104.85	Coupon (just paid)	5%	Recovery rate	50%
Par value	$100	Maturity	3 years	Risk-free rate	2%

Stevenson also finds in the file current credit spreads applicable to bonds similar (by ratings class) to DEP bond as shown in Exhibit 4.

Exhibit 4: Spreads

Rating	AAA	AA	A	BBB	BB	B	CCC/CC/C
Avg. Spread	0.24%	0.32%	0.49%	0.60%	0.77%	0.95%	1.22%

Question #37 of 60

Question ID: 1220784

Which of the credit analysis models shown in Exhibit 1 can only be used under the assumption that the issuing company's assets trade in a frictionless market?

A) **Structural models.**

B) Reduced form models.

C) Both structural models and reduced form models.

Explanation

Structural models require that the company's assets trade in a frictionless arbitrage free market.

For Further Reference:

(Study Session 13, Module 35.4, LOS 35.d)

Question #38 of 60

Question ID: 1220785

According to the structural model shown in Exhibit 2, the maximum amount an investor holding the bond would pay to a third party to remove the risk of default would be:

A) $0.65.

B) $22.86.

C) **$23.51.**

Explanation

The maximum amount an investor would to pay to remove the credit risk is the present value of the expected loss.

For Further Reference:

(Study Session 13, Module 35.4, LOS 35.d)

Question #39 of 60

Question ID: 1220786

If the volatility estimate is changed to 30% in the structural model shown in Exhibit 2, the calculated value of the IMC Bond would *most likely*:

A) remain the same.

B) **decrease.**

C) increase.

Explanation

Under the option analogy of the structural model, risky debt can be viewed as a portfolio comprising a long position in risk-free debt and a short put option on the company's asset with a strike price equal to the face value of the risky debt. When the asset volatility increases, the value of the put option increases and the value of the portfolio with short exposure to the put option will decrease. Hence the computed value of risky debt will be lower.

For Further Reference:

(Study Session 13, Module 35.4, LOS 35.d)

Question #40 of 60

Question ID: 1220787

Using information in Exhibit 3, if DEP Bond gets downgraded one notch, and assuming that the credit spreads change as shown in Exhibit 4, the rate of return for the hedge fund on account of the change in credit spread is *closest* to:

A) –0.27%.

B) –0.49%.

C) **–0.70%.**

Explanation

% return = (–) modified duration × (Δ spread) = (–) 2.60 × (1.22 – 0.95) = –0.70%.

For Further Reference:

(Study Session 13, Module 35.3, LOS 35.c)

Question #41 of 60

Question ID: 1220788

Based on information in Exhibit 3, if Stevenson determines that the recovery rate appropriate for DEP is 45%, the probability of default (POD) would *most likely*:

A) increase.

B) remain the same.

C) **decrease.**

Explanation

In general, given the market price of the bond, the estimated risk neutral probabilities of default and recovery rates are positively correlated. In this instance, we are given in the question that the recovery rate of 45% is determined to be appropriate (as opposed to the 50% rate used) to estimate the risk-neutral probability of default of 2.50% given in Exhibit 3. The lower the recovery rate assumed, the lower the risk-neutral probability of default (POD).

For Further Reference:

(Study Session 13, Module 35.1, LOS 35.a)

Question #42 of 60

Question ID: 1220789

Based on the information in Exhibit 3, if the bond defaults 2 years after purchase, the IRR for the investment in the bond would be *closest* to:

A) –16.67%.

B) –18.43%.

C) **–25.83%.**

Explanation

After two years, exposure = $5 + 105 / 1.02 = $107.94. Recovery rate (given in Exhibit 3) = 50%. Hence, recovery = 50% of $107.94 = $53.97. CF0 = –104.85, C01 = 5.0, C02 = $53.97. IRR = –25.83%

For Further Reference:

(Study Session 13, Module 35.2, LOS 35.a)

Questions #43-48 of 60

Questions 103 through 108 relate to Alternative Investments.

Parkway Terrace Case Scenario

Rita Larson, CFA, is an investment analyst for Siprah Properties, Inc. A group of wealthy investors, Ken Lundy, Chun Park, and Kareem Shabaz, are interested in purchasing Parkway Terrace, a 120-unit luxury apartment complex in Southeastern Florida. The current owners of Parkway Terrace have agreed to sell the property for $40,000,000.

Siprah represents both the existing owners and the potential new owners and are privy to additional information. Exhibit 1 and Exhibit 2 show the information Larson has collected during her due diligence.

Exhibit 1: Parkway Terrace Specifics

Parkway Terrace	
Projected first year net operating income	$3.3 million
Location/condition	Prime/good
LTV	75.0%
Loan term	25 years
Loan interest rate	4.5%
Monthly debt service	$166,750
Square footage	240,000
Expected holding period	10 years

Parkway Terrace	**Cost Estimates**
Effective age of building	10 years
Total economic life	50 years
Estimated value of land	$12,500,000
Replacement cost (p.s.f.)	$175.00
Developer's profit (p.s.f.)	$15.00
Curable deterioration	$5,000,000
Total obsolescence	$4,000,000
Expected selling price in 10 yrs	$60,000,000

Loan balance at end of 10 yrs	$21,797,543

Exhibit 2: Recent Transactions of Luxury Apartment Buildings in Southeastern Florida

Building	Craig Court	Kenton Place	Hester Oasis
Size in square feet	200,000	150,000	300,000
Age in years	7	10	13
Condition	Fair	Good	Good
Location	Prime	Secondary	Secondary
Age of transaction (in months)	9	5	16
Sales price	$32,000,000	$24,000,000	$45,000,000
Projected NOI	$2,560,000	$1,800,000	$3,150,000

Additional information:

- Depreciation is 1.5% per year.
- Condition can be good, fair, or bad. 7.5% is the adjustment needed per classification.
- Location can be prime, secondary, or tertiary. Prime locations are the most sought-after and 7.5% is the adjustment needed per classification.
- Market prices have been increasing at a rate of 0.50% per month.

Lundy states that all returns and ratios must exceed the minimum standards as listed below.

Minimum Requirements	
Levered required rate of return	20.0%
Debt service coverage ratio	1.50X
Equity dividend rate	25.0%

Economic Outlook for Southeast Florida

- Home prices are expected to rise.
- Interest rates are expected to increase.
- Population growth is expected to be higher than in other areas as more wealthy retirees are moving to the region.

The investors make the following statements about how to best approach this investment:

Ken Lundy:	"After we buy Parkway Terrace, we should offer shorter leases to take advantage of market conditions."
Chun Park:	"I think that after we buy, we should offer long leases to lock-in tenants and maximize profitability."
Kareem Shabaz:	"If we buy, we should take advantage of the low interest rates by using as much leverage as possible."

Larson is interested in using a real estate index in her analysis of suitability of real estate as an asset class for several of Siprah's clients. She notes that the firm subscribes to a proprietary index provided by REIQ. The REIQ index is an appraisal-based index that is very popular among real estate professionals. Larson is concerned about appraisal lag in the index and wants to adjust the index to remove this lag.

Question #43 of 60

Question ID: 1220791

The estimated value of the property using the direct capitalization approach is *closest* to:

A) $41.3 million.
B) $42.0 million.
C) **$44.0 million.**

Explanation

Using direct capitalization:

Cap rate data:

Office Building	Craig Court	Kenton Place	Hester Oasis
Cap rate	$2.56 / $32.0 = 8.0%	$1.80 / $24.0 = 7.5%	$3.15 / $45.0 = 7.0%

The average cap rate for the three apartment buildings is 7.5%. The estimated value of Parkway Terrance is calculated as the NOI of $3,300,000 divided by the cap rate of 7.5%, or $44.0 million.

For Further Reference:

(Study Session 15, Module 39.2, LOS 39.g)

Question #44 of 60

Question ID: 1220792

The estimated value of the property using the sales comparison approach is *closest* to:

A) $37.6 million.
B) **$42.2 million.**
C) $43.2 million.

Explanation

Using the sales comparison approach:

Variable	Craig Court	Kenton Place	Hester Oasis
Sale price	$32,000,000	$24,000,000	$45,000,000
Size	200,000	150,000	300,000

Sale price per sq ft	\$160.00	\$160.00	\$150.00
Age adjustment	-4.5%	0.0%	+4.5%
Condition adjustment	+7.5%	0.0%	0.0%
Location adjustment	0.0%	+7.5%	+7.5%
Date of sale adjustment	+4.5%	+2.5%	+8.0%
Total adjustments	+7.5%	+10.0%	+20.0%
Adjusted sales price psf	\$160 × (1 + 0.075) = \$172.00	\$160 × (1 + 0.100) = \$176.00	\$150 × (1 + 0.200) = \$180.00

Average sales price per square foot is \$176.00. The sales comparison method estimates the value of the property at 240,000 square feet × \$176.00 = \$42.2 million.

For Further Reference:

(Study Session 15, Module 39.4, LOS 39.i)

Question #45 of 60

Question ID: 1220793

For this question only, assume that the NOI growth rate is 0%. Based on Lundy's minimum requirements, the Parkway Terrace project is:

A) not worth pursuing because the equity dividend rate is below the minimum required.

B) worth pursuing because all three standards are met.

C) not worth pursuing because the debt service coverage ratio is below the minimum required.

Explanation

	Parkway Terrace	**Standards**
NOI	\$3,300,000	
Equity[1]	\$10,000,000	
Annual debt service	\$166,750 × 12 = \$2,001,000	
Equity dividend rate	= (\$3,300,000 − \$2,001,000) / \$10,000,000 = 13.0%	13.0% is less than 25.0%
DSCR	\$3,300,000/\$2,001,000 = 1.65X	1.65X exceeds 1.50X
Cash flows (PMT)	\$3,300,000 − \$2,001,000 = \$1,299,000	
Equity (PV)	\$10,000,000	
Sales price − outstanding loan in 10 years (FV)	\$60,000,000 − \$21,797,543 = \$38,202,457	

Sales date (N)	10	
Levered IRR[2]	22.6%	22.6% exceeds 20.0%
[1] LTV = 75% (given), equity = 25% of 40 million		
[2] Levered IRR calculation: N = 10; PV = –10,000,000; PMT = 1,299,000; FV = 38,202,457; CPT → I/Y = 22.56%		

For Further Reference:

(Study Session 15, Module 39.5, LOS 39.m)

Question #46 of 60

Question ID: 1220794

The estimated value of the property using the cost approach is *closest* to:

A) $28.5 million.

B) **$41.0 million.**

C) $45.0 million.

Explanation

Value of land (given)			$12,500,000
Replacement cost, including constructor's profit			
Building costs (psf)	$175		
Total area	240,000	$42,000,000	
Developer's profit	$15	$3,600,000	
		$45,600,000	
Reduction for curable deterioration		–$5,000,000	
		$40,600,000	
Reduction for incurable deterioration			
Total economic life	50		
Remaining economic life	40		
Effective age	10		
Ratio of effective to total	20.0%		
Reduction for incurable deterioration		–$8,120,000	
		$32,480,000	
Reduction for total obsolescence		–$4,000,000	
Total building value			$28,480,000
Total cost estimate			$40,980,000

For Further Reference:

(Study Session 15, Module 39.4, LOS 39.i)

Question #47 of 60

Question ID: 1220795

Which stated approach is *least likely* to result in an increase in potential returns?

- **A) Chun Park's.**
- **B)** Ken Lundy's.
- **C)** Kareem Shabaz's.

Explanation

The economic outlook on home prices and population trends indicate favorable conditions going forward. Shorter leases would allow rents to be adjusted upwards as demand for rentals increase, so Lundy's comment is correct. For a buyer of real estate, low interest rates along with a high loan-to-value (LTV) will maximize the potential for high levered returns. Tenants will benefit from longer leases in a high demand environment; this would not benefit the investors so Park's comment is incorrect.

For Further Reference:

(Study Session 15, Module 39.1, LOS 39.c, 39.d)

Question #48 of 60

Question ID: 1220796

To correct for appraisal lag in the REIQ index, which of the following is the *least appropriate* course of action for Larson?

- **A)** 'Unsmooth' the index.
- **B)** Use a transaction-based index.
- **C) Use more-recent appraisals.**

Explanation

Appraisal lag tends to smooth the reported returns of real estate indices, resulting in an artificially low correlation with other asset classes. Appraisal lag can be mitigated by unsmoothing the index or by using a transaction-based index. Using more-recent appraisals still relies on appraisal-based data.

For Further Reference:

(Study Session 15, Module 39.5, LOS 39.k)

Questions #49-52 of 60

Questions 109 through 112 relate to Portfolio Management.

Seva Wolff Case Scenario

Seva Wolff has just inherited $1.2 million. She meets with Roberta Gomez, her financial advisor, about changes to her investment policy statement—and hence, her portfolio—due to this major life event.

Gomez recommends that Wolff consider exchange-traded funds (ETFs) for her portfolio and suggests that she can compile a list of ETFs suitable for Wolff.

Wolff is uncertain about this class of investment product and asks several questions. In her response, Gomez makes the following statements:

Statement 1:	ETFs represent shares in a portfolio. The fund manager must disclose the holdings on an annual basis.
Statement 2:	ETFs trade on both primary and secondary markets.
Statement 3:	Market makers known as *authorized participants* keep ETF prices in line with a fund's NAV per share through a process known as *creation/redemption*. The costs of creation/redemption are borne by all of the fund's shareholders.
Statement 4:	Relative to traditional mutual funds, ETFs tend to distribute less in capital gains to their shareholders.

Gomez then mentions that Wolff should consider other asset classes that form part of a well-diversified portfolio. She says the expected return on an asset is affected by the investor's intertemporal rate of substitution. She makes the following statements:

Statement 5:	Typically, the covariance between a risk-averse investor's intertemporal rate of substitution and the current asset price is negative.
Statement 6:	An investor's breakeven inflation rate is the expected future inflation minus the risk premium for future inflation.

Question #49 of 60

Question ID: 1220798

Considering Gomez's statements 1 and 2:

- **A)** only statement 1 is accurate.
- **B)** **only statement 2 is accurate.**
- **C)** both statements are accurate.

Explanation

ETFs trade on both primary and secondary markets. Primary market trades occur between authorized participants and an ETF sponsor or manager. The ETF manager discloses a list of securities on a *daily basis* as part of the creation basket.

For Further Reference:

(Study Session 16, Module 43.1, LOS 43.a)

Question #50 of 60

Question ID: 1220799

Considering Gomez's statements 3 and 4:

A) only statement 3 is accurate.

B) **only statement 4 is accurate.**

C) neither statement is accurate.

Explanation

Authorized participants pass on the creation/redemption costs in the form of bid-ask spreads, which means that only transacting shareholders pay these costs, unlike with mutual funds where all shareholders bear this cost. Similarly, unlike mutual funds, ETFs are tax fair because redemptions are in-kind and do not affect the nontransacting shareholders; hence, capital gains distributions tend to be lower for ETFs compared to traditional mutual funds.

For Further Reference:

(Study Session 16, Module 43.1, LOS 43.a)

Question #51 of 60

Question ID: 1220800

Gomez's statement 5 is *best* described as:

A) correct.

B) **incorrect about the covariance between the intertemporal rate of substitution and the current asset price.**

C) incorrect about covariance being a factor in the pricing of securities.

Explanation

The covariance between a risk-averse investor's intertemporal rate of substitution and *expected future price* is negative.

For Further Reference:

(Study Session 17, Module 46.1, LOS 46.c)

Question #52 of 60

Question ID: 1220801

Gomez's statement 6 is *best* described as:

A) correct.

B) **incorrect, because breakeven inflation is equal to expected inflation plus a risk premium for inflation uncertainty.**

C) incorrect, because breakeven inflation is equal to expected inflation minus actual inflation.

Explanation

The breakeven inflation rate equals expected inflation plus a risk premium for inflation uncertainty.

For Further Reference:

(Study Session 17, Module 46.1, LOS 46.e)

Questions #53-56 of 60

Questions 113 through 116 relate to Portfolio Management.

Faver Asset Management Case Scenario

Brendan Mollie is a summer intern at Faver Asset Management. He is currently learning about the trading systems used at Faver. As part of his orientation, Sean McDermott, the head trader at Faver, provides a printout to Mollie as shown in **Limit order book for SIVP** .

Limit order book for SIVP

Bids				Asks			
Dealer	**Time Entered**	**Price**	**Size**	**Dealer**	**Time Entered**	**Price**	**Size**
A	11:29 am	12.22	2,500	C	9:31 am	12.26	1,500
B	11:39 am	12.21	2,000	A	9:31 am	12.28	2,500
C	11:43 am	12.20	3,000	B	9:41 am	12.31	3,000

McDermott states that Faver evaluates execution quality using effective spread and volume weighted average price (VWAP) benchmarks. McDermott makes the following statements:

Statement 1:	VWAP is the weighted average price of all the trades executed during the time interval between the order being placed and executed. The weights used are based on the number of shares in each trade.
Statement 2:	VWAP is not useful if the trade being evaluated is a significant part of the trading volume. VWAP, however, does account for the price impact cost.

Question #53 of 60

Question ID: 1220803

Using information in **Limit order book for SIVP** , the inside spread per share is *closest* to:

- **A) $0.04.**
- **B)** $0.08.
- **C)** $0.12.

Explanation

The best (i.e., highest) bid is $12.22, and the best (i.e., lowest) ask is $12.26.

inside spread = best ask – best bid = $12.26 – $12.22 = $0.04.

For Further Reference:

(Study Session 17, Module 48.1, LOS 48.b)

Question #54 of 60

Question ID: 1220804

For a purchase transaction at a price of \$12.27, and using dealer B quotes, the effective spread per share on the trade is *closest* to:

A) \$0.01.
B) **\$0.02.**
C) \$0.04.

Explanation

Dealer B's quotes are \$12.21–\$12.31 for a midquote of \$12.26.

per share effective spread transaction cost

= (side) × (transaction price – midquote price)

= (+1) × (12.27 − 12.26) = \$0.01

effective spread = 2 × (per share effective spread transaction cost)

= 2 × 0.01 = \$0.02

For Further Reference:

(Study Session 17, Module 48.1, LOS 48.b)

Question #55 of 60

Question ID: 1220805

McDermott's statement 1 is *most likely*:

A) correct.
B) incorrect about weighted average price during the time interval between the order being placed and executed.
C) **incorrect about weights being based on the number of shares of each trade.**

Explanation

VWAP is the weighted average price at which all trades were executed during the time interval between the order being placed and executed. The weights used are based on the dollar volume of each trade.

For Further Reference:

(Study Session 17, Module 48.1, LOS 48.b)

Question #56 of 60

Question ID: 1220806

McDermott's statement 2 is *best* described as:

A) correct.

B) incorrect about VWAP not being useful if the trade being evaluated is a significant part of the trading volume.

C) **incorrect about VWAP accounting for the price impact cost.**

Explanation

VWAP is not useful if the trade being evaluated is a significant part of the trading volume. In such cases, the benchmark VWAP and the trade VWAP will be close to each other, and the measured transaction cost will be skewed toward zero. VWAP *does not* capture the price impact cost. For example, if a large buy order was the only trade that was executed during a time interval at a price above the normal trading price, the benchmark VWAP will then be identical to the trade VWAP, and the calculated transaction cost will be zero. However, the trade was not executed at a good price.

For Further Reference:

(Study Session 17, Module 48.1, LOS 48.b)

Questions #57-60 of 60

Questions 117 through 120 relate to Portfolio Management.

Molenaar Asset Management Case Scenario

Rose Dongen is the chief risk officer at Molenaar Asset Management. Dongen is concerned about the risk metrics the firm is currently using, so she meets with Dan Kuiper, the firm's portfolio manager, and Dirk Schipper, the head trader. Kuiper explains that the firm has been using a Value at Risk (VaR) metric over the past year, and it seems to communicate downside risk very well. Kuiper makes the following statements:

Statement 1:	A 5% VaR measures the maximum loss with a 95% confidence level.
Statement 2:	Parametric VaR is more suitable than historical VaR if we expect fundamental changes in the economy.

Kuiper states that the expected return of the firm's portfolios over the next year is 11.20%, with annual standard deviation of 14.80%. Currently, the firm has $332 million in assets under management.

Schipper states that electronic trading has introduced new risks that are not currently measured. He says the firm's broker provides valuable algorithms, such as liquidity aggregators, and that he refrains from using standing limit orders even if they reduce the overall trading cost.

Question #57 of 60

Question ID: 1220808

Regarding Kuiper's statement 1 and statement 2:

A) only statement 1 is accurate.

B) only statement 2 is accurate.

C) **both statements are accurate.**

Explanation

Both statements are accurate. Five percent VaR is the minimum loss 5% of the time, or maximum loss with a 95% confidence level. Historical VaR is suitable only when past data is a good representation of the future. If we expect changes in the economic environment, updated parameters can be used with parametric VaR estimation to obtain robust estimates of VaR.

For Further Reference:

(Study Session 16, Module 45.1, LOS 45.a)

Question #58 of 60

Question ID: 1220809

The 5% annual $VaR using the parametric approach is *closest* to:

A) **$44 Million.**
B) $56 million.
C) $150 million.

Explanation

VaR% = 11.20% − (1.65 × 14.80%) = –13.22%.

$VaR = $332 million × 0.1322 = $43,890,400.

For Further Reference:

(Study Session 16, Module 45.1, LOS 45.b)

Question #59 of 60

Question ID: 1220810

The algorithm discussed by Schipper is *most likely* to be used in the presence of:

A) market manipulators.
B) hidden orders.
C) **market fragmentation.**

Explanation

Smart order routing and liquidity aggregators are algorithms used to counter market fragmentation. Liquidity aggregation algorithms create a super order book that exposes liquidity across all markets. Smart order routing algorithms send orders to the markets with the best prices and liquidity.

For Further Reference:

(Study Session 17, Module 48.2, LOS 48.e)

Question #60 of 60

Question ID: 1220811

Schipper's position on standing limit orders is *most likely* due to concerns about:

A) **quote matchers.**

B) quote stuffers.

C) front runners.

Explanation

Standing limit orders provide valuable information to other traders; they disclose the intent of the trader posting the order to buy or sell the specified quantity. Electronic quote matchers exploit their awareness of standing orders by using them as options to limit their trading risk.

For Further Reference:

(Study Session 17, Module 48.2, LOS 48.f)