Use the following information to answer Questions 1 through 6.

Charles Connor, CFA, is a portfolio manager at Apple Investments, LLC. Apple is a U.S.-based firm offering a wide spectrum of investment products and services. Connor manages the Biogene Fund, a domestic equity fund specializing in small capitalization growth stocks. The Biogene Fund generally takes significant positions in stocks, commonly owning 4.5-5% of the outstanding shares. The fund's prospectus limits positions to a maximum of 5% of the shares outstanding. The performance of the Biogene Fund has been superior over the last few years, but for the last two quarters the fund has underperformed its benchmark by a wide margin. Connor is determined to improve his performance numbers going forward.

The Biogene prospectus allows Connor to use derivative instruments in his investment strategy. Connor frequently uses options to hedge his fund's exposure as he builds or liquidates positions in his portfolio since Biogene's large positions often take several weeks to acquire. For example, when he identifies a stock to buy, he often buys call options to gain exposure to the stock. As he buys the stock, he sells off the options or allows them to expire. Connor has noticed that the increased volume in the call options often drives the stock price higher for a few days. He has seen a similar negative effect on stock prices when he buys large amounts of put options.

The end of the quarter is just a few days away, and Connor is considering three transactions:

**Transaction A: Buying Put Options on Stock A**

The Biogene Fund owns 4.9% of the outstanding stock of Company A, but Connor believes the stock is fully valued and plans to sell the entire position. He anticipates that it will take approximately 45 trading days to liquidate the entire Biogene position in Stock A.

**Transaction B: Buying Call Options on Stock B**

The Biogene Fund owns 5% of the outstanding stock of Company B. Connor believes there is significant appreciation potential for Stock B, but the stock price has dropped in recent weeks. Connor is hoping that by taking an option position, there will be a carryover effect on the stock price before quarter end.

**Transaction C: Selling the Biogene Fund's Entire Position in Stock C**

Connor believes that Stock C is still attractive, but he is selling the stock with the idea that he will repurchase the position next month. The motivation for the transaction is to capture a capital loss that will reduce the Biogene Fund's tax expense for the year.

Apple has an investment banking department that is active in initial public offerings (IPOs). George Arnold, CFA, is the senior manager of the IPO department. Arnold approached Connor about Stock D, a new IPO being offered by Apple. Stock D will open trading in two days. Apple had offered the IPO to all of its clients, but approximately 20% of the deal remained unsold. Having read the prospectus, Connor thinks Stock D would be a good fit for his fund, and he expects Stock D to improve his performance in both the short and long term. Connor is not aware of any information related to Stock D beyond that provided in the prospectus. Connor asked to purchase 5% of the IPO, but Arnold limited Biogene's share to 2%, explaining:
"With Biogene's reputation, any participation will make the unsold shares highly marketable. Further, we may need Biogene to acquire more Stock D shares at a later date if the price does not hold up."

Connor is disappointed in being limited to 2% of the offering and suggests to Arnold in an e-mail that, given the 2% limitation, Biogene will not participate in the IPO. Arnold responded a few hours later with the following message:

"I have just spoken with Ms. D, the CFO of Stock D. Although it is too late to alter the prospectus, management believes they will receive a large contract from a foreign government that will boost next year's sales by 20% or more. I urge you to accept the 2%-you won't be sorry!"

After reviewing Arnold's e-mail, Connor agrees to the 2% offer.

By executing Transaction A, Connor is:

A) violating the Standards because his option trading can be reasonably expected to affect the price of Stock A.
B) violating the Standards because the option position creates a profit opportunity in conflict with Biogene’s clients.
C) not violating the Standards.

Question #2 of 60

Charles Connor, CFA, is a portfolio manager at Apple Investments, LLC. Apple is a U.S.-based firm offering a wide spectrum of investment products and services. Connor manages the Biogene Fund, a domestic equity fund specializing in small capitalization growth stocks. The Biogene Fund generally takes significant positions in stocks, commonly owning 4.5-5% of the outstanding shares. The fund's prospectus limits positions to a maximum of 5% of the shares outstanding. The performance of the Biogene Fund has been superior over the last few years, but for the last two quarters the fund has underperformed its benchmark by a wide margin. Connor is determined to improve his performance numbers going forward.

The Biogene prospectus allows Connor to use derivative instruments in his investment strategy. Connor frequently uses options to hedge his fund's exposure as he builds or liquidates positions in his portfolio since Biogene's large positions often take several weeks to acquire. For example, when he identifies a stock to buy, he often buys call options to gain exposure to the stock. As he buys the stock, he sells off the options or allows them to expire. Connor has noticed that the increased volume in the call options often drives the stock price higher for a few days. He has seen a similar negative effect on stock prices when he buys large amounts of put options.

The end of the quarter is just a few days away, and Connor is considering three transactions:

Transaction A: Buying Put Options on Stock A

The Biogene Fund owns 4.9% of the outstanding stock of Company A, but Connor believes the stock is fully valued and plans to sell the entire position. He anticipates that it will take approximately 45 trading days to liquidate the entire Biogene position in Stock A.
Transaction B: Buying Call Options on Stock B

The Biogene Fund owns 5% of the outstanding stock of Company B. Connor believes there is significant appreciation potential for Stock B, but the stock price has dropped in recent weeks. Connor is hoping that by taking an option position, there will be a carryover effect on the stock price before quarter end.

Transaction C: Selling the Biogene Fund's Entire Position in Stock C

Connor believes that Stock C is still attractive, but he is selling the stock with the idea that he will repurchase the position next month. The motivation for the transaction is to capture a capital loss that will reduce the Biogene Fund’s tax expense for the year.

Apple has an investment banking department that is active in initial public offerings (IPOs). George Arnold, CFA, is the senior manager of the IPO department. Arnold approached Connor about Stock D, a new IPO being offered by Apple. Stock D will open trading in two days. Apple had offered the IPO to all of its clients, but approximately 20% of the deal remained unsold. Having read the prospectus, Connor thinks Stock D would be a good fit for his fund, and he expects Stock D to improve his performance in both the short and long term. Connor is not aware of any information related to Stock D beyond that provided in the prospectus. Connor asked to purchase 5% of the IPO, but Arnold limited Biogene's share to 2%, explaining:

"With Biogene's reputation, any participation will make the unsold shares highly marketable. Further, we may need Biogene to acquire more Stock D shares at a later date if the price does not hold up."

Connor is disappointed in being limited to 2% of the offering and suggests to Arnold in an e-mail that, given the 2% limitation, Biogene will not participate in the IPO. Arnold responded a few hours later with the following message:

"I have just spoken with Ms. D, the CFO of Stock D. Although it is too late to alter the prospectus, management believes they will receive a large contract from a foreign government that will boost next year's sales by 20% or more. I urge you to accept the 2%-you won't be sorry!"

After reviewing Arnold's e-mail, Connor agrees to the 2% offer.

By executing Transaction B, Connor is:

A) violating the Standards because his option trading can be reasonably expected to affect his quarterly performance.

B) not violating the Standards because the option position creates a profit opportunity consistent with Biogene's clients' interests.

C) not violating the Standards because he believes there is significant appreciation potential in Stock B.
of investment products and services. Connor manages the Biogene Fund, a domestic equity fund specializing in small
capitalization growth stocks. The Biogene Fund generally takes significant positions in stocks, commonly owning 4.5-5% of the
outstanding shares. The fund’s prospectus limits positions to a maximum of 5% of the shares outstanding. The performance of
the Biogene Fund has been superior over the last few years, but for the last two quarters the fund has underperformed its
benchmark by a wide margin. Connor is determined to improve his performance numbers going forward.

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options to hedge his fund’s exposure as he builds or liquidates positions in his portfolio since Biogene’s large positions often
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prices when he buys large amounts of put options.

The end of the quarter is just a few days away, and Connor is considering three transactions:

**Transaction A: Buying Put Options on Stock A**

The Biogene Fund owns 4.9% of the outstanding stock of Company A, but Connor believes the stock is fully valued and plans
to sell the entire position. He anticipates that it will take approximately 45 trading days to liquidate the entire Biogene position
in Stock A.

**Transaction B: Buying Call Options on Stock B**

The Biogene Fund owns 5% of the outstanding stock of Company B. Connor believes there is significant appreciation potential
for Stock B, but the stock price has dropped in recent weeks. Connor is hoping that by taking an option position, there will be a
carryover effect on the stock price before quarter end.

**Transaction C: Selling the Biogene Fund’s Entire Position in Stock C**

Connor believes that Stock C is still attractive, but he is selling the stock with the idea that he will repurchase the position next
month. The motivation for the transaction is to capture a capital loss that will reduce the Biogene Fund’s tax expense for the
year.

Apple has an investment banking department that is active in initial public offerings (IPOs). George Arnold, CFA, is the senior
manager of the IPO department. Arnold approached Connor about Stock D, a new IPO being offered by Apple. Stock D will
open trading in two days. Apple had offered the IPO to all of its clients, but approximately 20% of the deal remained unsold.
Having read the prospectus, Connor thinks Stock D would be a good fit for his fund, and he expects Stock D to improve his
performance in both the short and long term. Connor is not aware of any information related to Stock D beyond that provided
in the prospectus. Connor asked to purchase 5% of the IPO, but Arnold limited Biogene’s share to 2%, explaining:

"With Biogene’s reputation, any participation will make the unsold shares highly marketable. Further, we may need Biogene
to acquire more Stock D shares at a later date if the price does not hold up."

Connor is disappointed in being limited to 2% of the offering and suggests to Arnold in an e-mail that, given the 2% limitation,
Biogene will not participate in the IPO. Arnold responded a few hours later with the following message:

"I have just spoken with Ms. D, the CFO of Stock D. Although it is too late to alter the prospectus, management believes
they will receive a large contract from a foreign government that will boost next year’s sales by 20% or more. I urge you to
accept the 2%-you won’t be sorry!"
After reviewing Arnold's e-mail, Connor agrees to the 2% offer.

By executing Transaction C, Connor is:

A) violating the Standards by executing a transaction for tax reasons only.

B) violating the Standards by executing a transaction that provides tax benefits to the Biogene Fund.

C) not violating the Standards.

Question #4 of 60

Charles Connor, CFA, is a portfolio manager at Apple Investments, LLC. Apple is a U.S.-based firm offering a wide spectrum of investment products and services. Connor manages the Biogene Fund, a domestic equity fund specializing in small capitalization growth stocks. The Biogene Fund generally takes significant positions in stocks, commonly owning 4.5-5% of the outstanding shares. The fund's prospectus limits positions to a maximum of 5% of the shares outstanding. The performance of the Biogene Fund has been superior over the last few years, but for the last two quarters the fund has underperformed its benchmark by a wide margin. Connor is determined to improve his performance numbers going forward.

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The end of the quarter is just a few days away, and Connor is considering three transactions:

Transaction A: Buying Put Options on Stock A
The Biogene Fund owns 4.9% of the outstanding stock of Company A, but Connor believes the stock is fully valued and plans to sell the entire position. He anticipates that it will take approximately 45 trading days to liquidate the entire Biogene position in Stock A.

Transaction B: Buying Call Options on Stock B
The Biogene Fund owns 5% of the outstanding stock of Company B. Connor believes there is significant appreciation potential for Stock B, but the stock price has dropped in recent weeks. Connor is hoping that by taking an option position, there will be a carryover effect on the stock price before quarter end.

Transaction C: Selling the Biogene Fund’s Entire Position in Stock C
Connor believes that Stock C is still attractive, but he is selling the stock with the idea that he will repurchase the position next month. The motivation for the transaction is to capture a capital loss that will reduce the Biogene Fund's tax expense for the year.
Apple has an investment banking department that is active in initial public offerings (IPOs). George Arnold, CFA, is the senior manager of the IPO department. Arnold approached Connor about Stock D, a new IPO being offered by Apple. Stock D will open trading in two days. Apple had offered the IPO to all of its clients, but approximately 20% of the deal remained unsold. Having read the prospectus, Connor thinks Stock D would be a good fit for his fund, and he expects Stock D to improve his performance in both the short and long term. Connor is not aware of any information related to Stock D beyond that provided in the prospectus. Connor asked to purchase 5% of the IPO, but Arnold limited Biogene’s share to 2%, explaining:

"With Biogene’s reputation, any participation will make the unsold shares highly marketable. Further, we may need Biogene to acquire more Stock D shares at a later date if the price does not hold up."

Connor is disappointed in being limited to 2% of the offering and suggests to Arnold in an e-mail that, given the 2% limitation, Biogene will not participate in the IPO. Arnold responded a few hours later with the following message:

"I have just spoken with Ms. D, the CFO of Stock D. Although it is too late to alter the prospectus, management believes they will receive a large contract from a foreign government that will boost next year’s sales by 20% or more. I urge you to accept the 2%-you won’t be sorry!"

After reviewing Arnold’s e-mail, Connor agrees to the 2% offer.

By offering Biogene the opportunity to participate in the IPO of Stock D, Apple Investments has violated CFA Institute Standards relating to:

A) priority of transactions but not independence and objectivity.
B) independence and objectivity but not priority of transactions.
C) neither priority of transactions nor independence and objectivity.

Question #5 of 60

Charles Connor, CFA, is a portfolio manager at Apple Investments, LLC. Apple is a U.S.-based firm offering a wide spectrum of investment products and services. Connor manages the Biogene Fund, a domestic equity fund specializing in small capitalization growth stocks. The Biogene Fund generally takes significant positions in stocks, commonly owning 4.5-5% of the outstanding shares. The fund's prospectus limits positions to a maximum of 5% of the shares outstanding. The performance of the Biogene Fund has been superior over the last few years, but for the last two quarters the fund has underperformed its benchmark by a wide margin. Connor is determined to improve his performance numbers going forward.

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The Biogene Fund owns 5% of the outstanding stock of Company B. Connor believes there is significant appreciation potential for Stock B, but the stock price has dropped in recent weeks. Connor is hoping that by taking an option position, there will be a carryover effect on the stock price before quarter end.

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Connor believes that Stock C is still attractive, but he is selling the stock with the idea that he will repurchase the position next month. The motivation for the transaction is to capture a capital loss that will reduce the Biogene Fund’s tax expense for the year.

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After reviewing Arnold’s e-mail, Connor agrees to the 2% offer.

Arnold’s arguments for limiting Biogene’s share to 2% suggest that Apple:

A) may engage in a liquidity pumping strategy that would be acceptable given that
   Biogene is a related entity.

B) may engage in transaction-based manipulation of Stock D in the future, in violation of Standards relating to market manipulation.

C) is violating Standards related to priority of transactions by offering the IPO to Biogene before it is fully subscribed.
Charles Connor, CFA, is a portfolio manager at Apple Investments, LLC. Apple is a U.S.-based firm offering a wide spectrum of investment products and services. Connor manages the Biogene Fund, a domestic equity fund specializing in small capitalization growth stocks. The Biogene Fund generally takes significant positions in stocks, commonly owning 4.5-5% of the outstanding shares. The fund's prospectus limits positions to a maximum of 5% of the shares outstanding. The performance of the Biogene Fund has been superior over the last few years, but for the last two quarters the fund has underperformed its benchmark by a wide margin. Connor is determined to improve his performance numbers going forward.

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The Biogene Fund owns 5% of the outstanding stock of Company B. Connor believes there is significant appreciation potential for Stock B, but the stock price has dropped in recent weeks. Connor is hoping that by taking an option position, there will be a carryover effect on the stock price before quarter end.

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Connor is disappointed in being limited to 2% of the offering and suggests to Arnold in an e-mail that, given the 2% limitation, Biogene will not participate in the IPO. Arnold responded a few hours later with the following message:

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After reviewing Arnold’s e-mail, Connor agrees to the 2% offer.

Based upon Connor’s acceptance of the 2% limitation after receiving the e-mail from Arnold:

**A)** Connor has violated Standards relating to material nonpublic information, and Arnold has violated Standards relating to preservation of confidentiality.

**B)** Connor has not violated Standards relating to material nonpublic information, but Arnold has violated Standards relating to preservation of confidentiality.

**C)** Connor has not violated Standards relating to material nonpublic information, but Arnold has violated Standards relating to preservation of confidentiality and material nonpublic information.

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**Question #7 of 60**

Use the following information to answer Questions 7 through 12.

Alfred Farias, fixed income analyst for BNF, Inc., is analyzing the economic prospects of Procken, Krosse, Weira, and Toban, four countries in the same region. He collects the following economic and demographic statistics for the countries:

<table>
<thead>
<tr>
<th></th>
<th>Procken</th>
<th>Krosse</th>
<th>Weira</th>
<th>Toban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current real GDP (in $ billions)</td>
<td>$250.0</td>
<td>$250.0</td>
<td>$4,500.00</td>
<td>$4,800.00</td>
</tr>
<tr>
<td>Projected real GDP in 5 years (in $ billions) based on potential GDP growth rate</td>
<td>$306.0</td>
<td>$315.0</td>
<td>$5,262.00</td>
<td>$5,778.00</td>
</tr>
<tr>
<td>Long-term growth rate of capital</td>
<td>4.0%</td>
<td>4.2%</td>
<td>3.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Current capital base ($billions)</td>
<td>$782.9</td>
<td>$699.2</td>
<td>$18,750</td>
<td>$19,750</td>
</tr>
<tr>
<td>Imports (in $ billions)</td>
<td>$30.00</td>
<td>$60.00</td>
<td>$1,500.00</td>
<td>$900.00</td>
</tr>
<tr>
<td>Exports (in $ billions)</td>
<td>$32.00</td>
<td>$80.00</td>
<td>$1,000.00</td>
<td>$900.00</td>
</tr>
<tr>
<td>Population (in millions)</td>
<td>20.4</td>
<td>20.0</td>
<td>101.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Labor growth rate</td>
<td>1.9%</td>
<td>2.9%</td>
<td>0.4%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>
A GDP per capita below $25,000 is considered a developing country, and a GDP per capita greater than $25,000 is considered a developed country.

Farias concludes that Weira and Toban have reached steady-state growth.

In the latest round of trade negotiations, representatives from each country discussed their efforts to foster their countries’ economic development and benefit from the growth of world trade.

Procken’s Representative: "We are wary of the potential for loss of domestic industries if we remove trade barriers. Given the state of our economy, I’m not certain that we can lower our trade barriers any further."

Krosse’s Representative: "We in Krosse are not investing enough in infrastructure and education to increase the level of productivity and technology in our economy. We also need foreign direct investment and hence we welcome foreign investors."

Weira’s Representative: "We are concerned about my country’s negative trade balance. Weira needs more exports to sustain our growth."

Toban’s Representative: "We seem to be at a point in Toban where the growth rate of my country’s labor force may be insufficient to support our GDP growth rate."

Which country is most likely to benefit from capital deepening?

A) Weira.
B) Krosse.
C) Procken.

### Question #8 of 60

Alfred Farias, fixed income analyst for BNF, Inc., is analyzing the economic prospects of Procken, Krosse, Weira, and Toban, four countries in the same region. He collects the following economic and demographic statistics for the countries:

<table>
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<tr>
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Question ID: 693621
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Toban's Representative: "We seem to be at a point in Toban where the growth rate of my country’s labor force may be insufficient to support our GDP growth rate."

For this question only, assume that the population growth rate is the same for Krosse and Procke. A possible cause for the difference in growth rate of labor is that relative to Procken, Krosse has:

A) stricter immigration policies.
B) a lower labor participation rate.
C) experienced an increase in average hours worked.

**Question #9 of 60**
Alfred Farias, fixed income analyst for BNF, Inc., is analyzing the economic prospects of Procken, Krosse, Weira, and Toban, four countries in the same region. He collects the following economic and demographic statistics for the countries:

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<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>based on potential GDP</td>
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<td>$30.00</td>
<td>$60.00</td>
<td>$1,500.0</td>
<td>$900.00</td>
</tr>
<tr>
<td>Exports (in $ billions)</td>
<td>$32.00</td>
<td>$80.00</td>
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</tr>
<tr>
<td>Population (in millions)</td>
<td>20.4</td>
<td>20.0</td>
<td>101.0</td>
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</tr>
<tr>
<td>Labor growth rate</td>
<td>1.9%</td>
<td>2.9%</td>
<td>0.4%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Cost of capital relative to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total factor cost</td>
<td>32.5%</td>
<td>35.0%</td>
<td>25.0%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Average real annual</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>appreciation in equities</td>
<td>4.0%</td>
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</tr>
<tr>
<td>(past five year)</td>
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The long-term growth rate of technology (TFP) for Toban is closest to:
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<tbody>
<tr>
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<td>$4,500.0</td>
<td>$4,800.0</td>
</tr>
<tr>
<td>Projected real GDP in 5 years (in $ billions) based on potential GDP growth rate</td>
<td>$306.0</td>
<td>$315.0</td>
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<tr>
<td>Long-term growth rate of capital</td>
<td>4.0%</td>
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<td>25.0%</td>
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<tr>
<td>Average real annual appreciation in equities (past five year)</td>
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<td>4.5%</td>
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Going forward, which country is most likely to experience lower stock market appreciation than that experienced over the past five years?

A) Weira.
B) Toban.
C) Procken.

---

**Question #11 of 60**

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<tr>
<td>years (in $ billions)</td>
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<tr>
<td>based on potential GDP</td>
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<td></td>
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The rental price of capital in Weira is closest to:

A) 6%.
B) 12%.
C) 25%.

Question #12 of 60

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Based on the information provided, which developing country is most likely to achieve convergence in growth rates and standard of living with their developed counterparts?

A) Toban.
B) Krosse.
C) Procken.

Question #13 of 60

Use the following information to answer Questions 13 through 18.

Lyle Kreiger, CFA, has recently taken an analyst role at Rockway Stone, a small private equity firm based in the United States. As part of his role, he has been asked to review the most recent unaudited financial statements from several private companies that have been identified as potential investments for the firm.

Rockway Stone has a strict policy of only investing in companies that demonstrate a high level of financial reporting quality. The firm has developed an internal scoring system to rank the quality of a target company's financial statements. The scoring system awards points for each incident of low reporting quality; any company that reaches 40 points is not considered for potential investment.
potential investment. The scoring system is shown in Exhibit 1.

**Exhibit 1: Rockway Stone FR Quality Score Sheet**

<p>| | | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Any instance of a change in policy year-to-year or reclassification of assets, liabilities, revenues, or expenses</td>
<td>5 points</td>
</tr>
<tr>
<td>2.</td>
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<td>Additional 5 points</td>
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</tr>
<tr>
<td>4.</td>
<td>Any indication that earnings are not persistent</td>
<td>5 points</td>
</tr>
</tbody>
</table>

The first report Kreiger is reviewing is from Tolston Conductors, a firm providing highly polished metals to the technology industry. Kreiger's supervisor has instructed Kreiger to focus on the inventory note shown in Exhibit 2.

**Exhibit 2: Tolston Conductors Extract**

**Note 8 - Inventories**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Raw Materials ($'000)</td>
<td>481</td>
<td>409</td>
</tr>
<tr>
<td>WIP ($'000)</td>
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<td>894</td>
</tr>
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<td>508</td>
<td>496</td>
</tr>
</tbody>
</table>

Finished goods are classified as goods that are complete in all respects except packaging. Of the amount of inventory reported as work-in-progress in 2013, $342,000 has been reclassified as "other current assets." This WIP consisted primarily of highly polished metals that are now to be further reworked and are not expected to be ready for sale for two years.

Kreiger is also reviewing financial statements from Resonator Wellness, a firm producing health and wellness products in the U.K. Extracts from the pro forma financial statement recently released, along with 2013 and 2012 comparables, is shown in Exhibit 3.

**Exhibit 3: Resonator Wellness financial Statement - Extract**

<table>
<thead>
<tr>
<th>Headline Operating Profit: Quarter Ending 31 December 2014 (£000)</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockholders' Equity</td>
<td>8,380</td>
<td>7,980</td>
<td>7,450</td>
</tr>
<tr>
<td>Revenue Retail Outlet Sales</td>
<td>1,402.2</td>
<td>3,543.9</td>
<td>3,501.6</td>
</tr>
<tr>
<td>Online Sales</td>
<td>3,086.2</td>
<td>398.9</td>
<td>389.4</td>
</tr>
<tr>
<td>Headline Net Income</td>
<td>1,262.7</td>
<td>1,104.4</td>
<td>1,086.0</td>
</tr>
</tbody>
</table>

**Note A:** Headline net income excludes settlement costs and network costs. Settlement costs are one-off payments to settle legal procedures; these costs totaled (in £000) 20.0, 22.1, and 24.8 in 2012, 2013, and 2014, respectively. Network costs related to running the online business totaled (in £000) 202.0, 325.0, and 885.5 in 2012, 2013, and 2014, respectively. The financial accounts submitted to our bank in accordance with our loan covenants shows net income after charging both settlement and network costs in accordance with local GAAP.
Kreiger notes that the financial statements submitted to the firm’s bankers did indeed report net income correctly in accordance with local GAAP. However, this figure was much less prominent than headline net income, as the GAAP income was disclosed only in the footnotes rather than on the face of the income statement. Kreiger believes that the legal settlements are payments made to dissatisfied customers and are a normal part of business. Kreiger also believes that the increase in network cost is consistent with increased focus on online operations. Resonator’s required return on stockholders’ equity is 5%.

Kreiger’s final task is to analyze a set of financial statements for AltoJib Plc., a manufacturing and engineering company that is considering delisting. The company has a large number of investments in associates that Kreiger would like to isolate. Rockway Stone’s approach to isolating the impact of investment in associates is to perform some classic DuPont analysis to calculate ROE. In doing so, net margin and asset turnover (but not financial leverage) are adjusted for the impact of investment in associates.

The information Kreiger has to work with is shown in Exhibit 4 along with Rockway Stone’s method of isolating the impact of investment in associates on ROE using DuPont analysis.

**Exhibit 4: AltoJib Plc. Financial Statements (Extracts)**

<table>
<thead>
<tr>
<th></th>
<th>2014 (£000)</th>
<th>2013 (£000)</th>
<th>2012 (£000)</th>
<th>2011 (£000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>998.5</td>
<td>918.6</td>
<td>817.6</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>44.4</td>
<td>31.2</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>Income from Associates</td>
<td>17.8</td>
<td>11.2</td>
<td>8.4</td>
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<tr>
<td>Total Assets</td>
<td>1,260.8</td>
<td>1,166.6</td>
<td>1,043.2</td>
<td>1012.1</td>
</tr>
<tr>
<td>Investment in Associates</td>
<td>101.6</td>
<td>83.8</td>
<td>72.6</td>
<td>64.2</td>
</tr>
<tr>
<td>Equity</td>
<td>638.4</td>
<td>569.8</td>
<td>542.5</td>
<td>524.2</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>2.01</td>
<td>1.99</td>
<td>1.93</td>
<td></td>
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**Calculation of ROE excluding associates**

- Net margin is based on net income excluding income from associates.
- Asset turnover is calculated using average total assets excluding investments in associates.
- Financial leverage is calculated using average assets and average equity including investments in associates.

**Calculation of total ROE**

- Net margin is based on net income including income from associates.
- Asset turnover is calculated using average total assets including investments in associates.
- Financial leverage is calculated using average assets and average equity including investments in associates.

Due to the reclassification described in Exhibit 2, inventory turnover will *most likely*:

- **A)** increase.
- **B)** remain the same.
- **C)** decrease.
Question #14 of 60

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**Note A:** Headline net income excludes settlement costs and network costs. Settlement costs are one-off payments to settle legal procedures; these costs totaled (in £000) 20.0, 22.1, and 24.8 in 2012, 2013, and 2014, respectively. Network costs related to running the online business totaled (in £000) 202.0, 325.0, and 885.5 in 2012, 2013, and 2014, respectively. The financial accounts submitted to our bank in accordance with our loan covenants shows net income after charging both settlement and network costs in accordance with local GAAP.

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The information Kreiger has to work with is shown in Exhibit 4 along with Rockway Stone’s method of isolating the impact of investment in associates on ROE using DuPont analysis.

**Exhibit 4: AltoJib Plc. Financial Statements (Extracts)**

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Under the scoring system described in Exhibit 1 and taking into account the inventory note in Exhibit 2, Tolston Conductors should most accurately be assigned:

A) 5 points.
B) 10 points.
C) 20 points.

Question #15 of 60

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Exhibit 1: Rockway Stone FR Quality Score Sheet

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[https://www.kaplanlearn.com/education/test/print/6379302?testId=32038041](https://www.kaplanlearn.com/education/test/print/6379302?testId=32038041)
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Exhibit 3: Resonator Wellness financial Statement - Extract

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Exhibit 4: AltoJib Plc. Financial Statements (Extracts)

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Calculation of total ROE

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Which of the following statements is the least accurate regarding Resonator Wellness information shown in Exhibit 3?

A) The financial statements submitted to analysts are not as decision-useful as they could be due to biased accounting choices.
B) The financial statements submitted to the bank are not as decision-useful as they could be due to biased accounting choices.
C) The financial statements submitted to the bank are decision-useful as they exhibit no evidence of biased accounting choices.

Question #16 of 60

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Calculation of total ROE

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Which of the following conclusions is Krieger most likely to draw about the earnings quality of Resonator Wellness? 2014 net income after correctly including network and settlement costs shows:

A) compound annual growth of over 7%, and earnings that are of high quality as they are correctly calculated under GAAP.

B) negative compound annual growth of over 35%, and earnings that are of low quality.

C) negative compound annual growth of over 35%, and earnings that are of high quality as they are correctly calculated under GAAP.
Question #17 of 60

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- Financial leverage is calculated using average assets and average equity including investments in associates.

Calculation of total ROE

- Net margin is based on net income including income from associates.
- Asset turnover is calculated using average total assets including investments in associates.
Asset turnover is calculated using average total assets including investments in associates.

Financial leverage is calculated using average assets and average equity including investments in associates.

Treating an investment as an investment in associate rather than in a subsidiary is least likely to:

A) overstate net profit margins.
B) understate fixed assets.
C) understate net income.

Question #18 of 60

Lyle Kreiger, CFA, has recently taken an analyst role at Rockway Stone, a small private equity firm based in the United States. As part of his role, he has been asked to review the most recent unaudited financial statements from several private companies that have been identified as potential investments for the firm.

Rockway Stone has a strict policy of only investing in companies that demonstrate a high level of financial reporting quality. The firm has developed an internal scoring system to rank the quality of a target company’s financial statements. The scoring system awards points for each incident of low reporting quality; any company that reaches 40 points is not considered for potential investment. The scoring system is shown in Exhibit 1.

Exhibit 1: Rockway Stone FR Quality Score Sheet

<table>
<thead>
<tr>
<th>Incident</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any instance of a change in policy year-to-year or reclassification of assets, liabilities, revenues, or expenses</td>
<td>5 points</td>
</tr>
<tr>
<td>Any instance from 1. that also results in an increase in total assets</td>
<td>Additional 5 points</td>
</tr>
<tr>
<td>Any instance from 1. that also results in an increase in revenue</td>
<td>Additional 10 points</td>
</tr>
<tr>
<td>Any indication that earnings are not persistent</td>
<td>5 points</td>
</tr>
</tbody>
</table>

The first report Kreiger is reviewing is from Tolston Conductors, a firm providing highly polished metals to the technology industry. Kreiger’s supervisor has instructed Kreiger to focus on the inventory note shown in Exhibit 2.

Exhibit 2: Tolston Conductors Extract

<table>
<thead>
<tr>
<th>Note 8 - Inventories</th>
<th>2014</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Materials ($'000)</td>
<td>481</td>
<td>409</td>
</tr>
<tr>
<td>WIP ($'000)</td>
<td>1,392</td>
<td>894</td>
</tr>
<tr>
<td>Finished Goods ($'000)</td>
<td>508</td>
<td>496</td>
</tr>
</tbody>
</table>

Finished goods are classified as goods that are complete in all respects except packaging. Of the amount of inventory reported as work-in-progress in 2013, $342,000 has been reclassified as "other current assets." This WIP consisted primarily
of highly polished metals that are now to be further reworked and are not expected to be ready for sale for two years.

Kreiger is also reviewing financial statements from Resonator Wellness, a firm producing health and wellness products in the U.K. Extracts from the pro forma financial statement recently released, along with 2013 and 2012 comparables, is shown in Exhibit 3.

Exhibit 3: Resonator Wellness financial Statement - Extract

<table>
<thead>
<tr>
<th>Headline Operating Profit: Quarter Ending 31 December 2014 (£000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Stockholders’ Equity</td>
</tr>
<tr>
<td>Revenue Retail Outlet Sales</td>
</tr>
<tr>
<td>Online Sales</td>
</tr>
<tr>
<td>Headline Net Income</td>
</tr>
</tbody>
</table>

(Note A: Headline net income excludes settlement costs and network costs. Settlement costs are one-off payments to settle legal procedures; these costs totaled (in £000) 20.0, 22.1, and 24.8 in 2012, 2013, and 2014, respectively. Network costs related to running the online business totaled (in £000) 202.0, 325.0, and 885.5 in 2012, 2013, and 2014, respectively. The financial accounts submitted to our bank in accordance with our loan covenants shows net income after charging both settlement and network costs in accordance with local GAAP.

Kreiger notes that the financial statements submitted to the firm’s bankers did indeed report net income correctly in accordance with local GAAP. However, this figure was much less prominent than headline net income, as the GAAP income was disclosed only in the footnotes rather than on the face of the income statement. Kreiger believes that the legal settlements are payments made to dissatisfied customers and are a normal part of business. Kreiger also believes that the increase in network cost is consistent with increased focus on online operations. Resonator’s required return on stockholders’ equity is 5%.

Krieger’s final task is to analyze a set of financial statements for AltoJib Plc., a manufacturing and engineering company that is considering delisting. The company has a large number of investments in associates that Kreiger would like to isolate. Rockway Stone’s approach to isolating the impact of investment in associates is to perform some classic DuPont analysis to calculate ROE. In doing so, net margin and asset turnover (but not financial leverage) are adjusted for the impact of investment in associates.

The information Kreiger has to work with is shown in Exhibit 4 along with Rockway Stone’s method of isolating the impact of investment in associates on ROE using DuPont analysis.

Exhibit 4: AltoJib Plc. Financial Statements (Extracts)

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(£000)</td>
<td>(£000)</td>
<td>(£000)</td>
<td>(£000)</td>
</tr>
<tr>
<td>Revenue</td>
<td>998.5</td>
<td>918.6</td>
<td>817.6</td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>44.4</td>
<td>31.2</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>Income from Associates</td>
<td>17.8</td>
<td>11.2</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Total Assets</td>
<td>1,260.8</td>
<td>1,166.6</td>
<td>1,043.2</td>
<td>1,012.1</td>
</tr>
</tbody>
</table>
Investment in Associates | 101.6 | 83.8 | 72.6 | 64.2  
Equity | 638.4 | 569.8 | 542.5 | 524.2  
Financial leverage | 2.01 | 1.99 | 1.93  

Calculation of ROE excluding associates

- Net margin is based on net income excluding income from associates.
- Asset turnover is calculated using average total assets excluding investments in associates.
- Financial leverage is calculated using average assets and average equity including investments in associates.

Calculation of total ROE

- Net margin is based on net income including income from associates.
- Asset turnover is calculated using average total assets including investments in associates.
- Financial leverage is calculated using average assets and average equity including investments in associates.

Using the Rockway Stone approach to calculating ROE measures outlined in Exhibit 4, Kreiger is most likely to conclude that:

A) ROE excluding the effects of investment in associates has decreased from 2012 to 2014.

B) ROE excluding the effects of investment in associates in 2014 was approximately 35% lower than the total ROE in 2014.

C) total ROE was higher than the ROE excluding the effects of investment in associates for 2012 and 2014, but lower in 2013.

Question #19 of 60  

Use the following information to answer Questions 19 through 24.

In 2009, Continental Supply Company was formed to provide drilling equipment and supplies to contractors and oilfield production companies located throughout the United States. At the end of 2013, Continental Supply created a wholly owned foreign subsidiary, International Oilfield Incorporated, to begin servicing customers located in the North Sea. International Oilfield maintains its financial statements in a currency known as the local currency unit (LCU). Continental Supply follows U.S. GAAP and its presentation currency is the U.S. dollar.

For the years 2013 through 2016, the weighted-average and year-end exchange rates, stated in terms of local currency per U.S. dollar, were as follows:

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<td>1.00</td>
<td>1.50</td>
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International Oilfield accounts for its inventory using the lower-of-cost-or-market valuation method in conjunction with the first-in, first-out, cost flow assumption. All of the inventory on hand at the beginning of the year was sold during 2016. Inventory
remaining at the end of 2016 was acquired evenly throughout the year.

At the beginning of 2014, International Oilfield purchased equipment totaling LCU 975 million when the exchange rate was LCU 1.00 to $1. During 2015, equipment with an original cost of LCU 108 million was totally destroyed in a fire. At the end of 2015, International Oilfield received a LCU 92 million insurance settlement for the loss. On June 30, 2016, International Oilfield purchased equipment totaling LCU 225 million when the exchange rate was LCU 1.25 to $1.

For the years 2015 and 2016, Continental Supply reported International Oilfield revenues in its consolidated income statement of $375 million and $450 million, respectively. There were no inter-company transactions. Following are International Oilfield's balance sheets at the end of 2015 and 2016:

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</tr>
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</table>

At the end of 2016, International Oilfield's retained earnings account was equal to $525 million and, to date, no dividends have been paid. All of International Oilfield's capital stock was issued at the end of 2013.

Assuming International Oilfield is a significantly integrated sales division and virtually all operating, investing, and financing decisions are made by Continental Supply, foreign currency gains and losses that arise from the consolidation of International Oilfield should be reported in:

A) shareholders’ equity.
B) operating cash flow.
C) net income.

**Question #20 of 60**

In 2009, Continental Supply Company was formed to provide drilling equipment and supplies to contractors and oilfield production companies located throughout the United States. At the end of 2013, Continental Supply created a wholly owned foreign subsidiary, International Oilfield Incorporated, to begin servicing customers located in the North Sea. International Oilfield maintains its financial statements in a currency known as the local currency unit (LCU). Continental Supply follows U.S. GAAP and its presentation currency is the U.S. dollar.

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International Oilfield accounts for its inventory using the lower-of-cost-or-market valuation method in conjunction with the first-in, first-out, cost flow assumption. All of the inventory on hand at the beginning of the year was sold during 2016. Inventory remaining at the end of 2016 was acquired evenly throughout the year.

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At the end of 2016, International Oilfield’s retained earnings account was equal to $525 million and, to date, no dividends have been paid. All of International Oilfield’s capital stock was issued at the end of 2013.

Assuming that International Oilfield’s equipment is depreciated using the straight-line method over ten years with no salvage value, calculate the subsidiary’s 2016 depreciation expense under the temporal method.

A) $95.7 million.

B) $104.7 million.

C) $114.7 million.

---

Question #21 of 60

In 2009, Continental Supply Company was formed to provide drilling equipment and supplies to contractors and oilfield production companies located throughout the United States. At the end of 2013, Continental Supply created a wholly owned foreign subsidiary, International Oilfield Incorporated, to begin servicing customers located in the North Sea. International Oilfield’s financial statements are presented in the local currency unit (LCU). Continental Supply follows U.S. generally accepted accounting principles (GAAP) in preparing its own financial statements. The following table presents LCU/$US exchange rates for the years 2013 through 2016:

<table>
<thead>
<tr>
<th>Year</th>
<th>Average</th>
<th>Year-end</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.90</td>
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<tr>
<td>2016</td>
<td>1.25</td>
<td>1.50</td>
</tr>
</tbody>
</table>

International Oilfield's balance sheet at December 31, 2016, includes the following items:

- Cash and receivables: LCU 120.0 million
- Inventory: LCU 631.3 million
- Equipment: LCU 820.7 million
- Liabilities (all monetary): LCU 600.0 million
- Capital stock: LCU 350.0 million
- Retained earnings: LCU 622.0 million

At the end of 2016, International Oilfield’s retained earnings account was equal to $525 million and, to date, no dividends have been paid. All of International Oilfield’s capital stock was issued at the end of 2013.

Assuming that International Oilfield’s equipment is depreciated using the straight-line method over ten years with no salvage value, calculate the subsidiary’s 2016 depreciation expense under the temporal method.

A) $95.7 million.

B) $104.7 million.

C) $114.7 million.
Oilfield maintains its financial statements in a currency known as the local currency unit (LCU). Continental Supply follows U.S. GAAP and its presentation currency is the U.S. dollar.

For the years 2013 through 2016, the weighted-average and year-end exchange rates, stated in terms of local currency per U.S. dollar, were as follows:

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International Oilfield accounts for its inventory using the lower-of-cost-or-market valuation method in conjunction with the first-in, first-out, cost flow assumption. All of the inventory on hand at the beginning of the year was sold during 2016. Inventory remaining at the end of 2016 was acquired evenly throughout the year.

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For the years 2015 and 2016, Continental Supply reported International Oilfield revenues in its consolidated income statement of $375 million and $450 million, respectively. There were no inter-company transactions. Following are International Oilfield’s balance sheets at the end of 2015 and 2016:

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</table>

At the end of 2016, International Oilfield's retained earnings account was equal to $525 million and, to date, no dividends have been paid. All of International Oilfield’s capital stock was issued at the end of 2013.

Compute the cumulative translation adjustment reported on Continental Supply’s consolidated balance sheet at the end of 2016, assuming International Oilfield is a relatively self-contained and independent operation of Continental Supply.

A) -$227 million.
B) -$200 million.
C) $298 million.
In 2009, Continental Supply Company was formed to provide drilling equipment and supplies to contractors and oilfield production companies located throughout the United States. At the end of 2013, Continental Supply created a wholly owned foreign subsidiary, International Oilfield Incorporated, to begin servicing customers located in the North Sea. International Oilfield maintains its financial statements in a currency known as the local currency unit (LCU). Continental Supply follows U.S. GAAP and its presentation currency is the U.S. dollar.

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Compared to the temporal method, which of the following best describes the impact of the current rate method on International Oilfield's gross profit margin percentage for 2016 when stated in U.S. dollars? The gross profit margin would be:

A) lower.
B) higher.
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When re-measuring International Oilfield’s 2016 financial statements into the presentation currency, which of the following...
Question #24 of 60

In 2009, Continental Supply Company was formed to provide drilling equipment and supplies to contractors and oilfield production companies located throughout the United States. At the end of 2013, Continental Supply created a wholly owned foreign subsidiary, International Oilfield Incorporated, to begin servicing customers located in the North Sea. International Oilfield maintains its financial statements in a currency known as the local currency unit (LCU). Continental Supply follows U.S. GAAP and its presentation currency is the U.S. dollar.

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International Oilfield accounts for its inventory using the lower-of-cost-or-market valuation method in conjunction with the first-in, first-out, cost flow assumption. All of the inventory on hand at the beginning of the year was sold during 2016. Inventory remaining at the end of 2016 was acquired evenly throughout the year.

At the beginning of 2014, International Oilfield purchased equipment totaling LCU 975 million when the exchange rate was LCU 1.00 to $1. During 2015, equipment with an original cost of LCU 108 million was totally destroyed in a fire. At the end of 2015, International Oilfield received a LCU 92 million insurance settlement for the loss. On June 30, 2016, International Oilfield purchased equipment totaling LCU 225 million when the exchange rate was LCU 1.25 to $1.

For the years 2015 and 2016, Continental Supply reported International Oilfield revenues in its consolidated income statement of $375 million and $450 million, respectively. There were no inter-company transactions. Following are International Oilfield’s balance sheets at the end of 2015 and 2016:

<table>
<thead>
<tr>
<th>LCU in millions</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables</td>
<td>120.0</td>
<td>216.0</td>
</tr>
<tr>
<td>Inventory</td>
<td>631.3</td>
<td>650.4</td>
</tr>
<tr>
<td>Equipment</td>
<td>820.7</td>
<td>693.6</td>
</tr>
<tr>
<td>Liabilities (all monetary)</td>
<td>600.0</td>
<td>600.0</td>
</tr>
<tr>
<td>Capital stock</td>
<td>350.0</td>
<td>350.0</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>622.0</td>
<td>610.0</td>
</tr>
</tbody>
</table>
At the end of 2016, International Oilfield's retained earnings account was equal to $525 million and, to date, no dividends have been paid. All of International Oilfield's capital stock was issued at the end of 2013.

Assume the country where International Oilfield is operating has been experiencing 30% annual inflation over the past three years. Which of the following best describes the effect on Continental's consolidated financial statements for the year ended 2016?

A) A gain is recognized in the income statement.
B) A loss is recognized in the income statement.
C) A gain is recognized as a direct adjustment to the balance sheet.

Question #25 of 60  Question ID: 693628

Use the following information to answer Questions 25 through 30.

Sampson Aerospace is a publicly traded U.S. manufacturer. Sampson supplies communication and navigation control systems to manufacturers of airplanes for commercial and government use. The company operates two divisions: (1) Commercial Operations, and (2) Government Operations. Revenues from the Government Operations division comprise 80% of Sampson's total company revenues. Revenues for other companies in the industry are also driven primarily by sales to the U.S. government.

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Adjustment 3: Zone has purchased fractional ownership in a corporate jet for its CEO. The benefit, with an annual cost of $350,000, is deemed to be excessive by market standards and Smith adjusts the cost estimate by that amount.

Exhibit 1 shows projections of selected financial data for Zone for the next year.

Exhibit 1: Selected Financial Information (Estimates) for Zone, Inc.
Normalized EBITDA 32
Depreciation 11
SG&A expense 8
Net income 15
Capital expenditure 6
Working capital expense 5
Interest expense 2

*Note: Hope's tax rate is expected to be 25%.*

Sampson Aerospace recently announced that it is reducing its investment return assumption on its pension assets from 6% to 5%, and that it has entered negotiations to possibly acquire controlling equity interests in communications software firms, NavTech and Aerospace Communications. NavTech recently has decided to capitalize a significant portion of its research and development expense, and Aerospace Communications has restructured and reclassified many of its leases from operating to financial leases. Smith recently announced that Sampson had dropped out of negotiations with Knowledge Technologies, claiming it was likely not a sustainable business model.

Consensus forecasts for NavTech and Aerospace Communications are presented in Exhibit 2.

**Exhibit 2: Selected Financial Data for NavTech and Aerospace Communications**

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<tr>
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<th>NavTech</th>
<th>Aerospace Comm.</th>
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</tr>
<tr>
<td>Current stock price</td>
<td>$21.40</td>
<td>$25</td>
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Regarding Smith's adjustments to Zone's financial statements, the *most appropriate* adjustment is:

A) Adjustment 1.
B) Adjustment 2.
C) Adjustment 3.

**Question #26 of 60**

Sampson Aerospace is a publicly traded U.S. manufacturer. Sampson supplies communication and navigation control systems to manufacturers of airplanes for commercial and government use. The company operates two divisions: (1) Commercial Operations, and (2) Government Operations. Revenues from the Government Operations division comprise 80% of

https://www.kaplanlearn.com/education/test/print/6379302?testId=32038041
Sampson's total company revenues. Revenues for other companies in the industry are also driven primarily by sales to the U.S. government.

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Exhibit 1 shows projections of selected financial data for Zone for the next year.

**Exhibit 1: Selected Financial Information (Estimates) for Zone, Inc.**

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https://www.kaplanlearn.com/education/test/print/6379302?testId=32038041
For valuation purposes, Zone's expected (first year) FCFF is closest to:

A) $14 million.
B) $15 million.
C) $16 million.

---

**Question #27 of 60**

Sampson Aerospace is a publicly traded U.S. manufacturer. Sampson supplies communication and navigation control systems to manufacturers of airplanes for commercial and government use. The company operates two divisions: (1) Commercial Operations, and (2) Government Operations. Revenues from the Government Operations division comprise 80% of Sampson's total company revenues. Revenues for other companies in the industry are also driven primarily by sales to the U.S. government.

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Exhibit 1 shows projections of selected financial data for Zone for the next year.

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Consensus forecasts for NavTech and Aerospace Communications are presented in Exhibit 2.

### Exhibit 2: Selected Financial Data for NavTech and Aerospace Communications

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The most appropriate approach for Sampson Aerospace’s valuation of NavTech and Aerospace Communications is the:

**A)** dividend discount model.  

**B)** free cash flow model.  

**C)** relative value model.

---

**Question #28 of 60**

Sampson Aerospace is a publicly traded U.S. manufacturer. Sampson supplies communication and navigation control systems to manufacturers of airplanes for commercial and government use. The company operates two divisions: (1) Commercial

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Exhibit 2: Selected Financial Data for NavTech and Aerospace Communications
Regarding the financial statement information provided in the analyst's report, the quality of financial statements has improved least for:

A) Sampson.
B) NavTech.
C) Aerospace Communications.

**Question #29 of 60**

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By claiming that Knowledge Technologies is "not a sustainable business model," Sampson CEO Drew Smith would most likely estimate Knowledge Technologies's value using:

A) balance sheet value.
B) going concern value.
C) liquidation value.
Question #30 of 60

Sampson Aerospace is a publicly traded U.S. manufacturer. Sampson supplies communication and navigation control systems to manufacturers of airplanes for commercial and government use. The company operates two divisions: (1) Commercial Operations, and (2) Government Operations. Revenues from the Government Operations division comprise 80% of Sampson's total company revenues. Revenues for other companies in the industry are also driven primarily by sales to the U.S. government.

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Assuming that NavTech is valued according to the constant growth dividend model, the market expectation of dividend growth implied by NavTech's current stock price is closest to:

A) 3%.

B) 5%.

C) 7%.

---

**Question #31 of 60**

Use the following information to answer Questions 31 through 36.

Ivan Johnson is reviewing the investment merits of BioTLab, a fast-growing biotechnology company. BioTLab has developed several drugs, which are being licensed to major drug companies. BioTLab also has several drugs in phase III trials (phase III trials are the last testing stage before FDA approval). Johnson notes that two drugs recently received approval which should provide BioTLab solid revenue growth and generate predictable cash flow well into the future. Based on the potential for the two drugs, BioTLab's estimated annual cash flow growth rate for the next two years is 25%, and long-term growth is expected to be 12%. Because of BioTLab's attractive investment opportunities, the company does not pay a dividend. BioTLab's current weighted average cost of capital is 15% and its stock is currently trading at $50 per share. Financial information for BioTLab for the most recent 12 months is provided below:

- Net working capital excluding cash increased from $7,460,000 to $9,985,000.
- Book value increased from $81,250,000 to $101,250,000.
- BioTLab currently has no debt.
- Research facilities and production equipment were purchased for $8,450,000.
- BioTLab held non-operating assets in the amount of $875,000.
- Net income for the 12 months was $20,000,000.
- BioTLab has a marginal tax rate of 40%.
- Noncash charges for depreciation and restructuring for the 12 months were $1,250,000.
BioTLab's management has indicated an interest in establishing a dividend and will fund new drug research by issuing additional debt.

Johnson also reviews a competitor to BioTLab, Groh Group, which has a larger segment operating in a highly cyclical business. The Groh Group has a debt to equity ratio of 1.0 and pays no dividends. In addition, Groh Group plans to issue bonds in the coming year.

Johnson prefers to use free cash flow analysis to value investments. Which of the statements below is least accurate in describing the advantages of free cash flow valuation models?

A) Accounting issues limit the usefulness of reported earnings, while free cash flow is adjusted for these issues.
B) Determining free cash flow is easier than dividends.
C) A company must generate free cash flow to grow in the long run.

Question #32 of 60

Ivan Johnson is reviewing the investment merits of BioTLab, a fast-growing biotechnology company. BioTLab has developed several drugs, which are being licensed to major drug companies. BioTLab also has several drugs in phase III trials (phase III trials are the last testing stage before FDA approval). Johnson notes that two drugs recently received approval which should provide BioTLab solid revenue growth and generate predictable cash flow well into the future. Based on the potential for the two drugs, BioTLab's estimated annual cash flow growth rate for the next two years is 25%, and long-term growth is expected to be 12%. Because of BioTLab's attractive investment opportunities, the company does not pay a dividend. BioTLab's current weighted average cost of capital is 15% and its stock is currently trading at $50 per share. Financial information for BioTLab for the most recent 12 months is provided below:

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Using a two-stage, free cash flow to the firm model, determine which of the following is closest to the value of BioTLab.

A) $419 million.
B) $436 million.
C) $477 million.

Question #33 of 60

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If BioTLabs establishes a dividend and issues additional debt, the most likely effect on FCFF will be:

A) no effect.
B) a decrease in FCFF.
C) an increase in FCFF.
Question #34 of 60

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- Net income for the 12 months was $20,000,000.
- BioTLab has a marginal tax rate of 40%.
- Noncash charges for depreciation and restructuring for the 12 months were $1,250,000.

BioTLab’s management has indicated an interest in establishing a dividend and will fund new drug research by issuing additional debt.

Johnson also reviews a competitor to BioTLab, Groh Group, which has a larger segment operating in a highly cyclical business. The Groh Group has a debt to equity ratio of 1.0 and pays no dividends. In addition, Groh Group plans to issue bonds in the coming year.

Which model would be most appropriate in valuing the Groh Group?

A) FCFF model.
B) FCFE model.
C) Dividend Discount model.

Question #35 of 60

Ivan Johnson is reviewing the investment merits of BioTLab, a fast-growing biotechnology company. BioTLab has developed several drugs, which are being licensed to major drug companies. BioTLab also has several drugs in phase III trials (phase III trials are the last testing stage before FDA approval). Johnson notes that two drugs recently received approval which should provide BioTLab solid revenue growth and generate predictable cash flow well into the future. Based on the potential for the two drugs, BioTLab’s estimated annual cash flow growth rate for the next two years is 25%, and long-term growth is expected to be 12%. Because of BioTLab’s attractive investment opportunities, the company does not pay a dividend. BioTLab’s current
Ivan Johnson is reviewing the investment merits of BioTLab, a fast-growing biotechnology company. BioTLab has developed several drugs, which are being licensed to major drug companies. BioTLab also has several drugs in phase III trials (phase III trials are the last testing stage before FDA approval). Johnson notes that two drugs recently received approval which should provide BioTLab solid revenue growth and generate predictable cash flow well into the future. Based on the potential for the two drugs, BioTLab’s estimated annual cash flow growth rate for the next two years is 25%, and long-term growth is expected to be 12%. Because of BioTLab’s attractive investment opportunities, the company does not pay a dividend. BioTLab’s current weighted average cost of capital is 15% and its stock is currently trading at $50 per share. Financial information for BioTLab for the most recent 12 months is provided below:

- Net working capital excluding cash increased from $7,460,000 to $9,985,000.
- Book value increased from $81,250,000 to $101,250,000.
- BioTLab currently has no debt.
- Research facilities and production equipment were purchased for $8,450,000.
- BioTLab held non-operating assets in the amount of $875,000.
- Net income for the 12 months was $20,000,000.
- BioTLab has a marginal tax rate of 40%.
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BioTLab’s management has indicated an interest in establishing a dividend and will fund new drug research by issuing additional debt.

Johnson also reviews a competitor to BioTLab, Groh Group, which has a larger segment operating in a highly cyclical business. The Groh Group has a debt to equity ratio of 1.0 and pays no dividends. In addition, Groh Group plans to issue bonds in the coming year.

Ten years have passed and BioTLab’s drug pipeline has generated the expected growth. To support BioTLab’s growth, the company levered its balance sheet to a debt-to-equity ratio of 35% by borrowing an additional $1.6 million during the last year, even as it paid total interest of $4 million. Still, the company generated $20 million in free cash flow to equity. The company’s tax rate is 40% and pretax interest rate is 6%. The company’s required rate of return on equity equals 13%. Using a single-stage FCFF model results in a value of $483,508,770. The expected growth rate in BioTLab’s free cash flows is closest to:

A) 6%.
B) 8%.
C) 10%.
- Research facilities and production equipment were purchased for $8,450,000.
- BioTLab held non-operating assets in the amount of $875,000.
- Net income for the 12 months was $20,000,000.
- BioTLab has a marginal tax rate of 40%.
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BioTLab's management has indicated an interest in establishing a dividend and will fund new drug research by issuing additional debt.

Johnson also reviews a competitor to BioTLab, Groh Group, which has a larger segment operating in a highly cyclical business. The Groh Group has a debt to equity ratio of 1.0 and pays no dividends. In addition, Groh Group plans to issue bonds in the coming year.

Which of the following statements regarding free cash flow models is least likely correct?

A) Sensitivity analysis indicates that the FCFE model's valuation of BioTLab's common stock is most sensitive to the company's growth rate.
B) FCFE is net income plus depreciation minus net capital expenditures minus the increase in working capital plus net new debt financing.
C) FCFF can be inflated by increasing capital expenditures relative to depreciation.

Question #37 of 60

Use the following information to answer Questions 37 through 42.

Mike Diffle has been asked to evaluate the bonds of Hardin, Inc. The specific issue Diffle is considering has an 8% annual coupon and matures in two years. The bonds are currently callable at 101, and beginning in six months, they are callable at par. Bratton Corporation, Hardin's competitor, also has bonds outstanding which are identical to Hardin's except that they are not callable. Diffle believes the AA rating of both bonds is an accurate reflection of their credit risk. Diffle is wondering if the Bratton bonds might be a better investment than the Hardin bonds. Assume that the following 1-year interest rate tree is used to value bonds with a maturity of up to three years (this tree assumes interest rate volatility of 10%).

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Also, assume that the appropriate spot rates for securities maturing in one, two, and three years are 7.25%, 7.5%, and 7.80%, respectively.

https://www.kaplanlearn.com/education/test/print/6379302?testId=32038041
Diffle believes he should begin his analysis with the option-free Bratton bonds. He decides to consider two different approaches to valuing the Bratton Bonds—one that uses the current spot rate curve and another that uses the interest rate tree given above.

For the next step in his analysis, Diffle has decided to calculate the value of the Hardin bonds using the interest rate tree. His assumption is that the bond will be called at any node of the tree where the calculated value exceeds the call price. Diffle summarizes the results of his bond valuation analysis in a memo to his supervisor, Luke Puldo. In this memo, Diffle makes the following statements:

Statement 1: The value of the option embedded in the Hardin bonds can be derived by simply subtracting the interest rate tree value of the Hardin bonds from the interest rate tree value of the Bratton bonds.

Statement 2: I am concerned that the 10% volatility assumption used to develop the interest rate tree might be too low. A higher volatility assumption would result in a lower value for the Hardin bonds.

After reviewing Diffle’s analysis, Puldo notes that Diffle has not included any information on the option adjusted spread (OAS) for the Hardin bonds. Puldo suggests that Diffle should evaluate the OAS in order to get an idea of the liquidity risk of the Hardin bonds. Diffle counters that the OAS may not be very informative in this case, since he is uncertain as to the reliability of the interest rate volatility assumption.

To finish the analysis, Diffle would like to use his binomial model to evaluate the interest rate risk of both the Hardin bonds and the Bratton bonds. Diffle starts out with the benchmark interest rate tree and estimated OAS for both bonds. Then he shocks interest rates up and down by 25 basis points throughout the tree and adds the OAS estimated earlier. Using the tree and standard backward induction process, Diffle calculates values for the bonds. He plans to use these values as inputs into the following formulas for duration and convexity:

\[
\text{duration} = \frac{V_+ - V_-}{2 \times V_0 \times \Delta y} \quad \text{convexity} = \frac{V_+ + V_- - 2V_0}{V_0 \times (\Delta y)^2}
\]

Puldo notes that the duration estimate for the two bonds is not directly comparable. Assuming that the underlying option is at- or near-the-money, the duration of one of the bonds will be lower than the other one.

....................................................................................................................................................................................................

Calculate the value of the Bratton bonds using the interest rate tree.

A) 100.218.
B) 100.378.
C) 100.915.
coupon and matures in two years. The bonds are currently callable at 101, and beginning in six months, they are callable at par. Bratton Corporation, Hardin’s competitor, also has bonds outstanding which are identical to Hardin’s except that they are not callable. Diffle believes the AA rating of both bonds is an accurate reflection of their credit risk. Diffle is wondering if the Bratton bonds might be a better investment than the Hardin bonds. Assume that the following 1-year interest rate tree is used to value bonds with a maturity of up to three years (this tree assumes interest rate volatility of 10%).

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Also, assume that the appropriate spot rates for securities maturing in one, two, and three years are 7.25%, 7.5%, and 7.80%, respectively.

Diffle believes he should begin his analysis with the option-free Bratton bonds. He decides to consider two different approaches to valuing the Bratton Bonds—one that uses the current spot rate curve and another that uses the interest rate tree given above.

For the next step in his analysis, Diffle has decided to calculate the value of the Hardin bonds using the interest rate tree. His assumption is that the bond will be called at any node of the tree where the calculated value exceeds the call price. Diffle summarizes the results of his bond valuation analysis in a memo to his supervisor, Luke Puldo. In this memo, Diffle makes the following statements:

Statement 1: The value of the option embedded in the Hardin bonds can be derived by simply subtracting the interest rate tree value of the Hardin bonds from the interest rate tree value of the Bratton bonds.

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After reviewing Diffle’s analysis, Puldo notes that Diffle has not included any information on the option adjusted spread (OAS) for the Hardin bonds. Puldo suggests that Diffle should evaluate the OAS in order to get an idea of the liquidity risk of the Hardin bonds. Diffle counters that the OAS may not be very informative in this case, since he is uncertain as to the reliability of the interest rate volatility assumption.

To finish the analysis, Diffle would like to use his binomial model to evaluate the interest rate risk of both the Hardin bonds and the Bratton bonds. Diffle starts out with the benchmark interest rate tree and estimated OAS for both bonds. Then he shocks interest rates up and down by 25 basis points throughout the tree and adds the OAS estimated earlier. Using the tree and standard backward induction process, Diffle calculates values for the bonds. He plans to use these values as inputs into the following formulas for duration and convexity:

\[
\text{duration} = \frac{V_+ - V_-}{2 \times V_0 \times \Delta y}
\]

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\text{convexity} = \frac{V_+ + V_- - 2V_0}{V_0 \times (\Delta y)^2}
\]

Puldo notes that the duration estimate for the two bonds is not directly comparable. Assuming that the underlying option is at-
or near-the-money, the duration of one of the bonds will be lower than the other one.

Using the interest rate tree, and assuming that the bonds will be called at any node of the tree where the calculated value exceeds the call price, which of the following is closest to the value of the Hardin bonds?

A) 100.472.
B) 100.915.
C) 101.358.

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**Question #39 of 60**

Mike Diffle has been asked to evaluate the bonds of Hardin, Inc. The specific issue Diffle is considering has an 8% annual coupon and matures in two years. The bonds are currently callable at 101, and beginning in six months, they are callable at par. Bratton Corporation, Hardin's competitor, also has bonds outstanding which are identical to Hardin’s except that they are not callable. Diffle believes the AA rating of both bonds is an accurate reflection of their credit risk. Diffle is wondering if the Bratton bonds might be a better investment than the Hardin bonds. Assume that the following 1-year interest rate tree is used to value bonds with a maturity of up to three years (this tree assumes interest rate volatility of 10%).

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Also, assume that the appropriate spot rates for securities maturing in one, two, and three years are 7.25%, 7.5%, and 7.80%, respectively.

Diffle believes he should begin his analysis with the option-free Bratton bonds. He decides to consider two different approaches to valuing the Bratton Bonds—one that uses the current spot rate curve and another that uses the interest rate tree given above.

For the next step in his analysis, Diffle has decided to calculate the value of the Hardin bonds using the interest rate tree. His assumption is that the bond will be called at any node of the tree where the calculated value exceeds the call price. Diffle summarizes the results of his bond valuation analysis in a memo to his supervisor, Luke Puldo. In this memo, Diffle makes the following statements:

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After reviewing Diffle's analysis, Puldo notes that Diffle has not included any information on the option adjusted spread (OAS) for the Hardin bonds. Puldo suggests that Diffle should evaluate the OAS in order to get an idea of the liquidity risk of the Hardin bonds. Diffle counters that the OAS may not be very informative in this case, since he is uncertain as to the reliability of the interest rate volatility assumption.

To finish the analysis, Diffle would like to use his binomial model to evaluate the interest rate risk of both the Hardin bonds and the Bratton bonds. Diffle starts out with the benchmark interest rate tree and estimated OAS for both bonds. Then he shocks interest rates up and down by 25 basis points throughout the tree and adds the OAS estimated earlier. Using the tree and standard backward induction process, Diffle calculates values for the bonds. He plans to use these values as inputs into the following formulas for duration and convexity:

\[
\text{duration} = \frac{V_- - V_+}{2 \times V_0 \times \Delta Y} \\
\text{convexity} = \frac{V_+ + V_- - 2V_0}{V_0 \times (\Delta Y)^2}
\]

Puldo notes that the duration estimate for the two bonds is not directly comparable. Assuming that the underlying option is at- or near-the-money, the duration of one of the bonds will be lower than the other one.

Indicate whether the statements made by Diffle in his memo regarding the value of the embedded option and the effect of the volatility assumption are correct.

A) Only the statement regarding the value of the embedded option is correct.
B) Only the statement regarding the effect of the volatility assumption is correct.
C) Both statements are correct.

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**Question #40 of 60**

Mike Diffle has been asked to evaluate the bonds of Hardin, Inc. The specific issue Diffle is considering has an 8% annual coupon and matures in two years. The bonds are currently callable at 101, and beginning in six months, they are callable at par. Bratton Corporation, Hardin's competitor, also has bonds outstanding which are identical to Hardin's except that they are not callable. Diffle believes the AA rating of both bonds is an accurate reflection of their credit risk. Diffle is wondering if the Bratton bonds might be a better investment than the Hardin bonds. Assume that the following 1-year interest rate tree is used to value bonds with a maturity of up to three years (this tree assumes interest rate volatility of 10%).

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Also, assume that the appropriate spot rates for securities maturing in one, two, and three years are 7.25%, 7.5%, and 7.80%, respectively.

Diffle believes he should begin his analysis with the option-free Bratton bonds. He decides to consider two different approaches to valuing the Bratton Bonds—one that uses the current spot rate curve and another that uses the interest rate tree given above.

For the next step in his analysis, Diffle has decided to calculate the value of the Hardin bonds using the interest rate tree. His assumption is that the bond will be called at any node of the tree where the calculated value exceeds the call price. Diffle summarizes the results of his bond valuation analysis in a memo to his supervisor, Luke Puldo. In this memo, Diffle makes the following statements:

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\]

Puldo notes that the duration estimate for the two bonds is not directly comparable. Assuming that the underlying option is at- or near-the-money, the duration of one of the bonds will be lower than the other one.

Which of the following most accurately critiques the OAS discussion between Diffle and Puldo? Puldo is:

A) correct that the OAS will provide insight into the liquidity risk of the Hardin bonds, and Diffle is correct that different volatility assumptions would change the OAS.

B) correct that the OAS will provide insight into the liquidity risk of the Hardin Bonds, but Diffle is incorrect since OAS implicitly adjusts for the volatility of interest rates.

C) incorrect that the OAS will provide insight into the liquidity risk of the Hardin Bonds, but Diffle is correct that different volatility assumptions would change the OAS.
Mike Diffle has been asked to evaluate the bonds of Hardin, Inc. The specific issue Diffle is considering has an 8% annual coupon and matures in two years. The bonds are currently callable at 101, and beginning in six months, they are callable at par. Bratton Corporation, Hardin's competitor, also has bonds outstanding which are identical to Hardin's except that they are not callable. Diffle believes the AA rating of both bonds is an accurate reflection of their credit risk. Diffle is wondering if the Bratton bonds might be a better investment than the Hardin bonds. Assume that the following 1-year interest rate tree is used to value bonds with a maturity of up to three years (this tree assumes interest rate volatility of 10%).

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the Bratton bonds. Diffle starts out with the benchmark interest rate tree and estimated OAS for both bonds. Then he shocks interest rates up and down by 25 basis points throughout the tree and adds the OAS estimated earlier. Using the tree and standard backward induction process, Diffle calculates values for the bonds. He plans to use these values as inputs into the following formulas for duration and convexity:

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\text{duration} = \frac{V_- - V_+}{2 \times V_0 \times \Delta y} \quad \quad \quad \text{convexity} = \frac{V_+ + V_- - 2V_0}{V_0 \times (\Delta y)^2}
\]

Puldo notes that the duration estimate for the two bonds is not directly comparable. Assuming that the underlying option is at- or near-the-money, the duration of one of the bonds will be lower than the other one.

With regards to Puldo’s statement about comparability of duration of the two bonds, which of the following statements is most accurate? Bratton bonds’ duration would be:

A) lower than the duration of Hardin bonds under a rising interest rate scenario.
B) lower than the duration of Hardin bonds under a declining interest rate scenario.
C) higher than the duration of Hardin bonds under a declining interest rate scenario.

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**Question #42 of 60**

Mike Diffle has been asked to evaluate the bonds of Hardin, Inc. The specific issue Diffle is considering has an 8% annual coupon and matures in two years. The bonds are currently callable at 101, and beginning in six months, they are callable at par. Bratton Corporation, Hardin's competitor, also has bonds outstanding which are identical to Hardin's except that they are not callable. Diffle believes the AA rating of both bonds is an accurate reflection of their credit risk. Diffle is wondering if the Bratton bonds might be a better investment than the Hardin bonds. Assume that the following 1-year interest rate tree is used to value bonds with a maturity of up to three years (this tree assumes interest rate volatility of 10%).

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Diffle believes he should begin his analysis with the option-free Bratton bonds. He decides to consider two different approaches to valuing the Bratton Bonds—one that uses the current spot rate curve and another that uses the interest rate tree given above.

For the next step in his analysis, Diffle has decided to calculate the value of the Hardin bonds using the interest rate tree. His assumption is that the bond will be called at any node of the tree where the calculated value exceeds the call price. Diffle
summarizes the results of his bond valuation analysis in a memo to his supervisor, Luke Puldo. In this memo, Diffle makes the following statements:

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To finish the analysis, Diffle would like to use his binomial model to evaluate the interest rate risk of both the Hardin bonds and the Bratton bonds. Diffle starts out with the benchmark interest rate tree and estimated OAS for both bonds. Then he shocks interest rates up and down by 25 basis points throughout the tree and adds the OAS estimated earlier. Using the tree and standard backward induction process, Diffle calculates values for the bonds. He plans to use these values as inputs into the following formulas for duration and convexity:

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duration = \frac{V_- - V_+}{2 \times V_0 \times \Delta y}
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\]

Puldo notes that the duration estimate for the two bonds is not directly comparable. Assuming that the underlying option is at- or near-the-money, the duration of one of the bonds will be lower than the other one.

Which of the following statements is most accurate regarding Diffle’s calculation of duration and convexity?

A) The duration estimate will be inaccurate since it does not account for any change in cash flows due to the call option embedded in the Hardin bond.

B) The duration estimate for the Bratton bonds will reflect the projected percentage change in price for a 100-basis-point change in interest rates.

C) The estimates for both duration and convexity will be inaccurate because the OAS was not estimated again after the rate shock.

**Question #43 of 60**

Use the following information to answer Questions 43 through 48.

Charles Mabry manages a portfolio of equity investments heavily concentrated in the biotech industry. He just returned from an annual meeting among leading biotech analysts in San Francisco. Mabry and other industry experts agree that the latest industry volatility is a result of questionable product safety testing methodologies. While no firms in the industry have escaped
industry volatility is a result of questionable product safety testing methodologies. While no firms in the industry have escaped the public attention brought on by the questionable safety testing, one company in particular is expected to receive further attention—Biological Instruments Corporation (BIC), one of several long biotech positions in Mabry's portfolio. BIC is not expected to pay dividends in the foreseeable future. Several regulatory agencies as well as public interest groups have heavily criticized the rigor of BIC's product safety testing.

In an effort to manage the risk associated with BIC, Mabry has decided to allocate a portion of his portfolio to options on BIC's common stock. After surveying the derivatives market, Mabry has identified the following European options on BIC common stock:

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<tr>
<td>Call A</td>
<td>40</td>
</tr>
<tr>
<td>Call B</td>
<td>50</td>
</tr>
<tr>
<td>Call C</td>
<td>60</td>
</tr>
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Mabry wants to hedge the large BIC equity position in his portfolio, which closed yesterday (June 1) at $42 per share. Since Mabry is relatively inexperienced with utilizing derivatives in his portfolios, Mabry enlists the help of an analyst from another firm, James Grimell.

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"If you want to avoid selling the BIC position and are willing to earn only the risk-free rate of return, you should sell calls and buy puts on BIC stock with the same market premium. Alternatively, you could buy put options to manage the risk of your portfolio. I recommend waiting until the vega on the options rises, making them less attractive and cheaper to purchase."

Which of the following statements regarding the delta of the BIC options is correct? (Assume that the largest delta is defined as the delta furthest from zero.)

A) Call C has the largest delta of all the BIC options.
B) Put D has the smallest delta of all the BIC options.
C) Put F has the largest delta of all the BIC options.
the public attention brought on by the questionable safety testing, one company in particular is expected to receive further
attention—Biological Instruments Corporation (BIC), one of several long biotech positions in Mabry’s portfolio. BIC is not
expected to pay dividends in the foreseeable future. Several regulatory agencies as well as public interest groups have heavily
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<tr>
<td>Call A 40</td>
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buy puts on BIC stock with the same market premium. Alternatively, you could buy put options to manage the risk of your
portfolio. I recommend waiting until the vega on the options rises, making them less attractive and cheaper to purchase.”

If the gamma of Put E is equal to 0.081, which of the following correctly interprets the option’s gamma?

A) The sensitivity of Put E’s price to changes in BIC’s stock price is very likely to change.

B) A dynamic hedging strategy using Put E would require infrequent rebalancing.

C) A $1.00 increase in BIC’s stock price will increase Put E’s premium by $0.081.

**Question #45 of 60**

Charles Mabry manages a portfolio of equity investments heavily concentrated in the biotech industry. He just returned from
an annual meeting among leading biotech analysts in San Francisco. Mabry and other industry experts agree that the latest
industry volatility is a result of questionable product safety testing methodologies. While no firms in the industry have escaped
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Assuming that on October 15, the closing price of BIC common stock is $40 per share, how would the delta of Put F have changed from June 1?

A) The delta on Put F will move closer to -1.
B) The delta on Put F will move closer to 0.
C) The delta on Put F will move closer to 1.

Question #46 of 60

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<td><strong>Maturity</strong></td>
</tr>
<tr>
<td>Call A 40</td>
<td>October</td>
</tr>
<tr>
<td>Call B 50</td>
<td>October</td>
</tr>
<tr>
<td>Call C 60</td>
<td>October</td>
</tr>
<tr>
<td>Put D 30</td>
<td>November</td>
</tr>
<tr>
<td>Put E 40</td>
<td>November</td>
</tr>
<tr>
<td>Put F 50</td>
<td>November</td>
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If the premium on Put D on November 1 is $3.18, which of the following has most likely occurred?

A) The price of BIC stock has decreased to $26.82.
B) BIC had a negative earnings surprise.
C) Volatility of BIC stock has decreased.

---

Question #47 of 60

Charles Mabry manages a portfolio of equity investments heavily concentrated in the biotech industry. He just returned from an annual meeting among leading biotech analysts in San Francisco. Mabry and other industry experts agree that the latest industry volatility is a result of questionable product safety testing methodologies. While no firms in the industry have escaped the public attention brought on by the questionable safety testing, one company in particular is expected to receive further attention—Biological Instruments Corporation (BIC), one of several long biotech positions in Mabry’s portfolio. BIC is not expected to pay dividends in the foreseeable future. Several regulatory agencies as well as public interest groups have heavily criticized the rigor of BIC’s product safety testing.
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<tr>
<td>Call A</td>
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</tr>
<tr>
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<td>50</td>
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Given Mabry's assessment of the risks associated with BIC, which option strategy would be the most effective in delta-neutral hedging the risk of BIC stock?

A) Add put options to the portfolio as the put option delta moves closer to zero.

B) Add call options to the portfolio as the call option delta moves further away from zero.

C) Add put options to the portfolio as the put option delta moves toward -1.
criticized the rigor of BIC's product safety testing.

In an effort to manage the risk associated with BIC, Mabry has decided to allocate a portion of his portfolio to options on BIC's common stock. After surveying the derivatives market, Mabry has identified the following European options on BIC common stock:

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<th>Strike</th>
<th>Maturity</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call A</td>
<td>40</td>
<td>October</td>
<td>3.51</td>
</tr>
<tr>
<td>Call B</td>
<td>50</td>
<td>October</td>
<td>1.98</td>
</tr>
<tr>
<td>Call C</td>
<td>60</td>
<td>October</td>
<td>1.42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIC Put Options</th>
<th>Strike</th>
<th>Maturity</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Put D</td>
<td>30</td>
<td>November</td>
<td>2.31</td>
</tr>
<tr>
<td>Put E</td>
<td>40</td>
<td>November</td>
<td>4.14</td>
</tr>
<tr>
<td>Put F</td>
<td>50</td>
<td>November</td>
<td>9.21</td>
</tr>
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Which of the following correctly analyzes Grimell's comments regarding earning the risk-free rate by selling calls and buying puts, and regarding waiting for the option vegas to increase?

A) Only Grimell's statement regarding earning the risk-free rate is correct.
B) Only Grimell's statement regarding waiting for vega to rise is correct.
C) Neither of Grimell's statements is correct.

Question #49 of 60

Use the following information to answer Questions 49 through 54.

Gordon Stenton, CFA, works for a small investment management firm in the United States. Part of his role involves managing portfolios for high net worth individuals. Currently, Stenton is corresponding with Rachael Matten. Matten has withdrawn her assets from Altune, an asset management firm, and is considering allocating $2.5 million of those funds to Stenton’s firm. Matten indicated that she was unhappy with the level of disclosure about trading methods and risk management that were employed at Altune.

https://www.kaplanlearn.com/education/test/print/6379302?testId=32038041

Question ID: 693639
Matten has sent Stenton a list of questions to assess the policies at Stenton’s firm.

The first issue Matten wants clarification on pertains to the use of VaR. Among the documents that Altune sent Matten were two statements (shown in Exhibit 1). Matten was unsure of how to interpret either of these statements.

**Exhibit 1: VaR**

**Statement 1**

Your portfolio has a 5% monthly VaR of $225,000.

VaR is calculated using a parametric methodology and an assumption of normality for all risk factors.

**Statement 2**

The average loss once the VaR cutoff is exceeded is estimated to be $320,000.

Matten indicates that in statement 1, she understands that the $225,000 represents the loss that will occur 5% of the time. She would also like to confirm her suspicion that the maximum loss is impossible to calculate.

To provide Matten the risk management process employed at his firm, Stenton intends to send Matten the description shown in Exhibit 2.

**Exhibit 2: Risk Management Measures Primary Risk**

**Management Measure - Steps**

**Step 1:** Identify the top 10 exposures for the portfolio.

**Step 2:** Design a hypothetical global event that would simultaneously adversely affect each of the exposures.

**Step 3:** Assess the impact on the portfolio.

Matten has also raised an issue about the trading methods used by Stenton. She has read several negative comments in the financial press regarding the use of algorithms to trade and about the growing trend of high frequency trading. She has asked Stenton to comment on the trends she has noted in Exhibit 3.

**Exhibit 3: Trading Concerns**

**Concern 1**

The increase in the use of execution algorithms to take advantage of arbitrage opportunities.

**Concern 2**

The increase in market fragmentation resulting from an increase in high frequency trading.

Which of the following statements regarding statement 1 in Exhibit 1 is least accurate?
A) The monthly VaR of $225,000 indicates an annual VaR of $2.7 million.
B) The fund will lose more than $225,000 in a month, 5% of the time.
C) The methodology described is not applicable to portfolios containing option positions.

Question #50 of 60

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Exhibit 3: Trading Concerns

Concern 1
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Concern 2
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Statement 2 in Exhibit 1 is most accurately described as:

A) incremental VaR.
B) conditional VaR.
C) marginal VaR.

Question #51 of 60

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**Concern 1**

The increase in the use of execution algorithms to take advantage of arbitrage opportunities.

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The increase in market fragmentation resulting from an increase in high frequency trading.

In her interpretation of VaR, Matten is *most likely*:

A) correct regarding the $225,000 but incorrect regarding the maximum loss.

B) incorrect regarding the $225,00 but correct regarding the maximum loss.

C) incorrect regarding the $225,000 and the maximum loss.

**Question #52 of 60**

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**Exhibit 3: Trading Concerns**

**Concern 1**
The increase in the use of execution algorithms to take advantage of arbitrage opportunities.

**Concern 2**
The increase in market fragmentation resulting from an increase in high frequency trading.

The primary risk management measure discussed in Exhibit 2 is most accurately described as:

A) sensitivity risk analysis.

B) reverse stress testing.
C) Monte Carlo simulation.

Question #53 of 60

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Exhibit 3: Trading Concerns

Concern 1
The increase in the use of execution algorithms to take advantage of arbitrage opportunities.

Concern 2
The increase in market fragmentation resulting from an increase in high frequency trading.

Stenton should most accurately respond to concern 1 in Exhibit 3 by saying that:

A) The increase in the use of execution algorithms to profit from arbitrage opportunities has increased market efficiency.

B) The increase in the use of execution algorithms to profit from arbitrage opportunities has decreased market stability.

C) Execution algorithms are not used to profit from arbitrage opportunities.

Question #54 of 60

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**Exhibit 3: Trading Concerns**

**Concern 1**
The increase in the use of execution algorithms to take advantage of arbitrage opportunities.

**Concern 2**
The increase in market fragmentation resulting from an increase in high frequency trading.

Stenton should *most accurately* respond to concern 2 in Exhibit 3 by saying that:

A) high frequency trading is only partly responsible for market fragmentation.

B) only one specific type of high frequency trading algorithm, smart order routing, is responsible for market fragmentation.

C) smart order routing was developed as a response to market fragmentation.

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**Question #55 of 60**

Use the following information to answer Questions 55 through 60.

Samuel Edson, CFA, portfolio manager for Driver Associates, employs a multifactor model to evaluate individual stocks and portfolios. Edson examines several possible risk factors and finds two that are priced in the marketplace. These two factors are investor sentiment (IS) risk and business cycle (BC) risk. Edson manages three equity portfolios (A, B, and C) and derives the following relationships for each portfolio, as well as for the S&P 500 stock market index:

\[ R_A = 0.1750 + 2.0F_{IS} + 1.5F_{BC} \]  

https://www.kaplanlearn.com/education/test/print/6379302?testId=32038041
\[ R_A = 0.1750 + 2.0F + 1.5F \]  
\[ R_B = 0.0940 + 0.5F + 0.8F \]  
\[ R_C = 0.1550 + 1.25F + 1.15F \]  
\[ R_{S&P} = 0.1475 + 1.5F + 1.25F \]

where:

\( R_A, R_B, R_C, \) and \( R_{S&P} = \) the returns for portfolios A, B, C, and the S&P 500 market index, respectively.

Portfolios A and B are well-diversified, while C is a less than fully diversified, value-oriented portfolio. \( F_{IS} \) is the surprise in investor sentiment, and \( F_{BC} \) is the surprise in the business cycle. Surprises in the risk factors are defined as the difference between the actual value and the predicted value.

Exhibit 1 provides data for the actual and predicted values for the investor sentiment and business cycle risk factors.

### Exhibit 1: Risk Factor Values

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Driver Associates also provides Edson with the following multifactor equations on three additional portfolios (D, E, and Z):

\[ E(R_D) = R_F + 1.0F_{IS} + 0.0F_{BC} = 9\% \]  
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Driver Associates uses a two-factor Arbitrage Pricing Model to develop equilibrium expected returns for individual stocks and portfolios:

\[ E(R) = \text{risk-free rate} + b_1\lambda_1 + b_2\lambda_2 \]

where:

\( b_1 = \) sensitivity of the portfolio return to changes in risk factor 1  
\( b_2 = \) sensitivity of the portfolio return to changes in risk factor 2  
\( \lambda_1 = \) risk premium associated with risk factor 1  
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At the time of Edson’s analysis, the long-term government bond yield was 5%.
Equations (1) through (4) are examples of:

A) macroeconomic factor models.
B) fundamental factor models.
C) statistical factor models.

---

**Question #56 of 60**

Samuel Edson, CFA, portfolio manager for Driver Associates, employs a multifactor model to evaluate individual stocks and portfolios. Edson examines several possible risk factors and finds two that are priced in the marketplace. These two factors are investor sentiment (IS) risk and business cycle (BC) risk. Edson manages three equity portfolios (A, B, and C) and derives the following relationships for each portfolio, as well as for the S&P 500 stock market index:

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At the time of Edson's analysis, the long-term government bond yield was 5%.

Edson's supervisor, Rosemary Valry, asks Edson to interpret the intercept of the multifactor equation for Portfolio A (0.175). Edson should respond that the intercept equals:

A) the expected return for Portfolio A, assuming no surprises in the macroeconomic variables.

B) the expected return for Portfolio A, assuming the macroeconomic variables (investor sentiment and business cycle) equal zero.

C) the expected abnormal return for Portfolio A.

Question #57 of 60

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At the time of Edson's analysis, the long-term government bond yield was 5%.

The firm-specific surprises contributed 1.20% to Portfolio A's return. Using the data in Exhibit 1, the actual return on Portfolio A is closest to:

A) 12.2%.
B) 13.7%.
Question #58 of 60

Samuel Edson, CFA, portfolio manager for Driver Associates, employs a multifactor model to evaluate individual stocks and portfolios. Edson examines several possible risk factors and finds two that are priced in the marketplace. These two factors are investor sentiment (IS) risk and business cycle (BC) risk. Edson manages three equity portfolios (A, B, and C) and derives the following relationships for each portfolio, as well as for the S&P 500 stock market index:

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At the time of Edson's analysis, the long-term government bond yield was 5%.

Driver Associates uses portfolios D, E, and Z as part of their risk management strategies. Which of these portfolios are factor portfolios?

- **A)** Portfolios D and E.
- **B)** Portfolios D and Z.
- **C)** Portfolio Z only.

---

**Question #59 of 60**

Samuel Edson, CFA, portfolio manager for Driver Associates, employs a multifactor model to evaluate individual stocks and portfolios. Edson examines several possible risk factors and finds two that are priced in the marketplace. These two factors are investor sentiment (IS) risk and business cycle (BC) risk. Edson manages three equity portfolios (A, B, and C) and derives the following relationships for each portfolio, as well as for the S&P 500 stock market index:

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At the time of Edson’s analysis, the long-term government bond yield was 5%.

Valry instructs Edson to use the two-factor model to examine Driver Associates's well-diversified balanced Portfolio P, which has an Investor Sentiment factor sensitivity equal to 1.25 and a Business Cycle factor sensitivity equal to 1.10. According to Driver Associates's model, the expected return for Portfolio P equals:

- A) 8.3%.
- B) 10.8%.
- C) 13.3%.

**Question #60 of 60**

Samuel Edson, CFA, portfolio manager for Driver Associates, employs a multifactor model to evaluate individual stocks and...
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At the time of Edson's analysis, the long-term government bond yield was 5%.

Assuming Driver Associates uses the S&P 500 index as their performance benchmark, which of the following portfolios is expected to have the least active factor risk?

A) Portfolio D.  
B) Portfolio E.  
C) Portfolio Z.