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Question 1

Question Type: MultipleChoice

Lauren Jacobs, CFA, is an equity analyst for DF Investments. She is evaluating Iron Parts Inc. Iron Parts is a manufacturer of interior systems and components for automobiles. The company is the world's second largest original equipment auto parts supplier, with a market capitalization of \$1.8 billion. Based on Iron Parts's low price-to-book value ratio of 0.9* and low price-to-sales ratio of 0.15x, Jacobs believes the stock could be an interesting investment. However, she wants to review the disclosures found in the company's financial footnotes. In particular, Jacobs is concerned about Iron Parts's defined benefit pension plan. The following information for 2007 and 2008 is provided.

<i>In millions, December 31</i>	<i>2008</i>	<i>2007</i>
Projected benefit obligation (PBO)	\$635	\$510
Service cost	37	33
Accumulated benefit obligation (ABO)	570	460
Actual return on plan assets	37	32
Benefits paid	22	15
Unamortized past service cost	37	45
Fair market value of plan assets	395	327
Discount rate	6.0%	5.5%
Expected return on plan assets	8.2%	7.5%
Rate of compensation increase	4.0%	4.0%

Iron Parts has adopted SFAS No. 158, Employers' Accounting for Defined Benefit Pensions and Other Postretirement Plans.

Jacobs wants to fully understand the impact of changing pension assumptions on Iron Parts's balance sheet and income statement. In addition, she would like to compute Iron Parts's economic pension expense.

As of December 31, 2008, the funded status of Iron Parts's pension plan was:

Options:

A- \$175 million underfunded.

B- \$240 million underfunded.

C- \$ 183 million overfunded.

Answer:

B

Explanation:

Funded status equals fair value of plan assets minus PBO ($395 - 635 = -240$). (Study Session 6, LOS 22.c,f)

Question 2

Question Type: MultipleChoice

Michelle Norris, CFA, manages assets for individual investors in the United States as well as in other countries. Norris limits the scope of her practice to equity securities traded on U.S. stock exchanges. Her partner, John Witkowski, handles any requests for international securities. Recently, one of Norris's wealthiest clients suffered a substantial decline in the value of his international portfolio. Worried that his U.S. allocation might suffer the same fate, he has asked Norris to implement a hedge on his portfolio. Norris has agreed to her client's request and is currently in the process of evaluating several futures contracts. Her primary interest is in a futures contract on a broad equity index that will expire 240 days from today. The closing price as of yesterday, January 17, for the equity index was 1,050. The expected dividends from the index yield 2% (continuously compounded annual rate). The effective annual risk-free rate is 4.0811%, and the term structure is flat. Norris decides that this equity index futures contract is the appropriate hedge for her client's portfolio and enters into the contract.

Upon entering into the contract, Norris makes the following comment to her client:

"You should note that since we have taken a short position in the futures contract, the price we will receive for selling the equity index in 240 days will be reduced by the convenience yield associated with having a long position in the underlying asset. If there were no cash flows associated with the underlying asset, the price would be higher. Additionally, you should note that if we had entered into a forward contract with the same terms, the contract price would most likely have been lower but we would have increased the credit risk exposure of the portfolio."

Sixty days after entering into the futures contract, the equity index reached a level of 1,015. The futures contract that Norris purchased is now trading on the Chicago Mercantile Exchange for a price of 1,035. Interest rates have not changed. After performing some calculations, Norris calls her client to let him know of an arbitrage opportunity related to his futures position. Over the phone, Norris makes the following comments to her client:

"We have an excellent opportunity to earn a riskless profit by engaging in arbitrage using the equity index, risk-free assets, and futures contracts. My recommended strategy is as follows: We should sell the equity index short, buy the futures contract, and pay any dividends occurring over the life of the contract. By pursuing this strategy, we can generate profits for your portfolio without incurring any risk."

Determine the price of the futures contract on the equity index as of the inception date, January 18.

Options:

A- 1,064.

B- 1,071.

C- 1,078.

Answer:

A

Explanation:

The futures price can be calculated by growing the spot price at the difference between the continuously compounded risk-free rate and the dividend yield as a continuously compounded rate. The continuously compounded risk-free rate is $\ln(1.040811) = 4\%$, so the futures price for a 240-day future is:

$$FP = S_0 e^{(r-d)n} = 1,050 e^{(0.04-0.02)(240/650)} = 1,064$$

(Study Session 16, LOS 59.b)

Question 3

Question Type: MultipleChoice

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Evaluate Green's comments in her memo to the managers at NVS Bank. State whether Green is correct regarding the effectiveness of the alternative to using an interest rate cap or floor and regarding the effectiveness of creating an artificial interest rate collar.

Options:

- A- Green is only correct with respect to the artificial collar.
- B- Green is only correct with respect to the cap or floor alternative.
- C- Green is correct with respect to both the artificial collar and the cap or floor alternative.

Answer:

B

Explanation:

NVS Bank is concerned that interest rates will rise, increasing the interest expense on their 2-year Boating rate notes. To mitigate this risk, an appropriate strategy would be to buy an interest rate cap which would limit the exposure to rising interest rates. Other instruments can replicate the payoffs of a cap, however, if the cap itself is not desirable. An interest rate cap increases in value as interest rates rise since a payoff to the buyer of the cap becomes more probable. Put options on fixed income instruments have a similar response to interest rates. As interest rates rise, the value of the underlying fixed income instruments decreases. Since a put option gives the owner the right to sell a bond that has decreased in price at higher than market value, the value of the option increases as interest rates rise. With the right amount of long put options on fixed income instruments, NVS Bank could replicate the cap payoff without actually buying the cap. Greens alternative to the cap or floor is therefore correct. To create a collar, NVS Bank would need to purchase a cap and sell a floor. Doing so would give NVS protection from rising interest rates and would decrease the cost of gaining such protection. However, a collar would create exposure to decreasing interest rates through the short floor position. A long cap position can be replicated through either long put options on fixed income instruments or long call options on interest rates. A short floor

position can be replicated either through short call options on fixed income instruments or short put options on interest rates. Green has correctly stated the long cap position but has incorrectly stated the short floor position. Therefore, the collar replication strategy is incorrect. (Study Session 17, LOS62.b)

Question 4

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Which of the following combinations of interest rate derivatives from Exhibit 3 would effectively limit the maximum and minimum interest cost associated with NVS Bank's \$100 million floating rate notes?

Options:

- A- Sell a 2-year semiannual settlement interest rate floor and buy a 2-year semiannual settlement interest rate cap.
- B- Sell a 1 -year quarterly settlement interest rate floor and buy a 1 -year quarterly settlement interest rate cap.
- C- Sell a 2-year quarterly settlement interest rate floor and buy a 2-year quarterly settlement interest rate cap.

Answer:

A

Explanation:

An interest rate collar consists of a long interest rate cap and a short interest rate floor. The long cap limits the interest rate exposure on the upside, effectively capping the maximum interest rate the purchaser of the cap will have to pay. The short floor creates exposure to interest rates on the downside, requiring payments as interest rates fall. Because NVS Bank is short a floating rate note, its interest costs should fall with interest rates. However, the short floor limits the degree to which interest expense can fall, effectively limiting the minimum interest payment. The combination of the maximum interest rate and the minimum interest rate creates the collar within which the interest rate may fluctuate. NVS Bank is exposed to quarterly floating rate interest payments for a period of two years. To create an appropriate collar, the bank should purchase the 2-year quarterly settlement cap and sell the 2-year quarterly settlement floor. (Study Session 17, LOS 62.a)

Question 5

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Calculate the expected payoff after 720 days from a short position in the 2-year semiannual interest rate floor in Exhibit 3 if LIBOR at that time is expected to be 2.40%.

Options:

A- -\$ 150X00.

B- -\$75,000.

C- \$0.

Answer:

A

Explanation:

The writer or seller of a floor (i.e., the short position) receives the premium or fee from the buyer of the floor. This fee is the maximum gain that the seller can achieve. The seller will be forced to make a payment to the buyer if the floor expires in the money. For a floor to be in the money, the reference rate (LIBOR in this case) must be below the contract rate. The contract rate on the 2-year semiannual floor is 2.70% which is greater than the expected LIBOR rate of 2.40% after 720 days. Therefore, the floor is in the money and the seller must make a payment to the buyer. The payment is calculated as follows:

$$(0.0240 - 0.0270) \left(\frac{180}{360} \right) (100,000,000) = -\$150,000$$

Note that the purchaser of the floor in this scenario would receive a positive \$150,000 payoff.

(Study Session 17, LOS 62.b)

Question 6

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Determine which of the interest rate derivatives in Exhibit 3 is appropriate to manage the interest rate risk associated with NVS Bank's \$100 million debt obligation and calculate the payoff from this derivative 360 days after the contract initiation if LIBOR at that time is

expected to be 3.75%.

Options:

A- \$25,000.

B- \$50,000.

C- \$100,000.

Answer:

A

Explanation:

NVS Banks is issuing a \$100 million floating rate note with quarterly interest rate payments and a maturity of two years to fund its operations. The interest rate risk of such a measure is that interest rates will rise dramatically causing the interest cost on the floating rate note to increase as well. To offset this risk, NVS Bank can take a long position in an interest rate cap. If interest rates rise, the counterparty to the cap will make a payment to NVS Bank. If interest rates fall, no payment is made. Since the cap is a set of interest rate options, NVS has the right to receive payments if the cap is in the money but will never owe any payments if the cap is out of the money. To obtain this option, NVS must pay the cap premium (\$2,200,000). The most appropriate cap is the 2-year quarterly payment cap with a contract rate of 3.65%. The expected payoff after 360 days is determined by comparing the expected LIBOR rate (3.75%) to the contract rate on the cap (3.65%). Since the actual rate is expected to be above the cap rate, the cap is in the money and the payoff

is calculated as follows:

$$(0.0375 - 0.0365) \left(\frac{90}{360} \right) (100,000,000) = \$25,000$$

(Study Session 17, LOS 62.a,b)

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GlobeCorp is concerned with its exposure to the interest rate swap initiated one year ago. Evaluate the strategies recommended by Bow in Exhibit 2.

Options:

- A- Only Strategy 1 will neutralize GlobeCorp's interest rate swap exposure.
- B- Only Strategy 2 will neutralize GlobeCorp's interest rate swap exposure.
- C- Either Strategy 1 or Strategy 2 will neutralize GlobeCorp's interest rate swap exposure.

Answer:

A

Explanation:

A payer swap such as GlobeCorps is obligated to pay multiple fixed rate payments to, and receive multiple floating rate payments from, the counterparty. The payer swap therefore gains (loses) value if interest rates rise (fall) since floating rate payments will be greater (less) than the required fixed rate payments. Similarly, the long position in a forward rate agreement (FRA) allows the purchaser to borrow at a specified rate (pay fixed). If interest rates rise (fall), the long FRA position gains (loses) value. Thus, we can state that a series of long off-market FRAs is equivalent to a pay fixed interest rate swap. To offset an existing pay fixed swap position, a position with opposite exposure to interest rates must be established. Therefore, Strategy 1 is appropriate since it involves a short position in a series of off-market FRA contracts with settlement dates and underlying interest rates that correspond to the swap payment dates (the FRAs are all based on 180-day or 6-month LIBOR and settle in 6 months, 12 months, 18 months, and 24 months). Strategy 2 will not offset GlobeCorps existing interest rate swap position. A pay fixed interest rate swap position is equivalent to being short a fixed rate bond and long a floating rate bond. In order to neutralize such a position, the opposite transactions need to be established. Strategy 2 correctly states that GlobeCorp should take a short position in a floating rate note but this will only offset half of the swap position.

GlobeCorp must also purchase a fixed rate bond with a coupon rate equal to the fixed rate on the swap. (Study Session 17, LOS 6 Lb)

Question 8

Question Type: MultipleChoice

William Bow, CFA, is a risk manager for GlobeCorp, an international conglomerate with operations in the technology, consumer products, and medical devices industries. Exactly one year ago, GlobeCorp, under Bow's advice, entered into a 3-year payer interest rate swap with semiannual floating rate payments based on the London interbank offered rate (LIBOR) and semiannual fixed rate payments based on an annual rate of 2.75%. At the time of initiation, the swap had a value of zero and the notional principal was set equal to \$150 million. The counterparty to GlobeCorp's swap is NVS Bank, a commercial bank that also serves as a swap dealer. Exhibit 1 below summarizes the current LIBOR term structure.

Exhibit 1: Current LIBOR Term Structure

	<i>Days</i>							
	90	180	270	360	450	540	630	720
LIBOR	2.25%	2.45%	3.20%	3.75%	4.20%	3.80%	3.10%	2.40%

Upper management at GlobeCorp feels that the original swap has served its intended purpose but that circumstances have changed and it is now time to offset the firm's exposure to the swap. Because they cannot find a counterparty to an offsetting swap transaction, management has asked Bow to come up with alternative measures to offset the swap exposure. Bow created a report for the management team which outlines several strategies to neutralize the swap exposure. Two of his strategies are included in Exhibit 2.

Exhibit 2: Swap Neutralization Strategies

<i>Strategy 1</i>	<i>Strategy 2</i>
Establish short positions in a series of off-market LIBOR forward rate agreements including a 6 × 12 FRA, 12 × 18 FRA, 18 × 24 FRA, and 24 × 30 FRA with a notional principal of \$150 million for each contract.	Sell a floating rate note with a semiannual coupon payment based on 180 day LIBOR, a maturity of two years, and a par value of \$150 million.

After examining its long-term liabilities, NVS Bank has decided that it currently needs to borrow \$100 million over the next two years to finance its operations. For this type of funding need, NVS generally issues quarterly coupon short-term floating rate notes based on 90-day LIBOR. NVS is concerned, however, that interest rates may shift upward and the LIBOR curve may become upward sloping. To manage this risk, NVS is considering utilizing interest rate derivatives. Managers at the bank have collected quotes on over-the-counter interest rate caps and floors from a well known securities dealer. The quotes, which are based on a notional principal of \$100 million, are provided in Exhibit 3.

Exhibit 3: Interest Rate Caps and Floors

			<i>Interest Rate Cap</i>		<i>Interest Rate Floor</i>	
<i>Term (Years)</i>	<i>LIBOR</i>	<i>Settlement</i>	<i>Rate</i>	<i>Price</i>	<i>Rate</i>	<i>Price</i>
1	90-day	Quarterly	3.50%	\$2,000,000	2.55%	\$1,900,000
1	180-day	Semiannual	3.50%	\$2,000,000	2.55%	\$1,900,000
2	90-day	Quarterly	3.65%	\$2,200,000	2.70%	\$2,090,000
2	180-day	Semiannual	3.65%	\$2,200,000	2.70%	\$2,090,000

One of the managers at NVS Bank, Lois Green, has expressed her distrust of the securities dealer quoting prices on the caps and floors. In a memo to the CFO, Green suggested that NVS use an alternative but equivalent approach to manage the interest rate risk associated with its two-year funding plan. Following is an excerpt from Green's memo:

"Rather than using a cap or floor, NVS Bank can effectively manage its exposure to interest rates resulting from the 2-year funding requirement by taking long positions in a series of put options on fixed-income instruments with expiration dates that coincide with the payment dates on the floating rate note."

"As a cheaper alternative, NVS can effectively manage its exposure to interest rates resulting from the 2-year funding requirement by creating a collar using long positions in a series of call options on interest rates and long positions in a series of call options on fixed income instruments all of which would have expiration dates that coincide with the payment dates on the floating rate note."

Which of the following statements regarding the GlobeCorp swap initiated one year ago is most likely correct?

Options:

- A- NVS Bank has greater current credit risk than GlobeCorp.
- B- The value of the swap to GlobeCorp has increased since initiation.
- C- Globecorp's upcoming payment will be lower than its previous payment.

Answer:

A

Explanation:

At the initiation of GlobeCorp's fixed rate payer swap, the value was zero and the fixed rate was set at 2.75%. To determine the change in the value of the swap, we must determine the fixed rate on comparable swaps available today using the LIBOR curve. Since a year has passed since the initiation of the swap, a comparable swap as of today would be a 2-year swap with semiannual payments. First calculate the discount factors for the 180-, 360-, 540-, and 720-day LIBOR interest rates as follows:

$$180\text{-day} = \frac{1}{1 + 0.0245 \left(\frac{180}{360} \right)} = 0.9879; \quad 360\text{-day} = \frac{1}{1 + 0.0375 \left(\frac{360}{360} \right)} = 0.9639;$$

$$540\text{-day} = \frac{1}{1 + 0.0380 \left(\frac{540}{360} \right)} = 0.9461; \quad 720\text{-day} = \frac{1}{1 + 0.0240 \left(\frac{720}{360} \right)} = 0.9542$$

Next calculate the fixed rate currently available on 2-year semiannual pay swaps as follows:

$$\left[\frac{(1 - 0.9542)}{(0.9879 + 0.9639 + 0.9461 + 0.9542)} \right] \times \left(\frac{360}{180} \right) = 0.0119 \times 2 = 0.0238 = 2.38\%$$

GlobcCorp could enter into an equivalent swap today at an annualized fixed rate of 2.38% versus the fixed rate of 2.75% that it is currently paying on the existing swap. Therefore, the existing swap has negative value to GlobeCorp and has thus decreased from an initial value of zero. Current credit risk is greater for NVS Bank since the negative value of the swap to GlobcCorp increases the chance that the company will default on the obligation and fail to make the required payments to NVS. (Study Session 17, LOS 6l.c,i)

Question 9

Question Type: MultipleChoice

Rock Torrey, an analyst for International Retailers Incorporated (IRI), has been asked to evaluate the firm's swap transactions in general, as well as a 2-year fixed for fixed currency swap involving the U.S. dollar and the Mexican peso in particular. The dollar is Torrey's domestic currency, and the exchange rate as of June 1, 2009, was \$0.0893 per peso. The swap calls for annual payments and exchange of notional principal at the beginning and end of the swap term and has a notional principal of \$100 million. The counterparty to the swap is GHS Bank, a large full-service bank in Mexico.

The current term structure of interest rates for both countries is given in the following table:

<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
360 days	4.0%	5.0%
720 days	4.5%	5.2%

Torrey believes the swap will help his firm effectively mitigate its foreign currency exposure in Mexico, which stems mainly from shopping centers in high-end resorts located along the eastern coastline. Having made this conclusion, Torrey begins writing his report for the management of IRI. In addition to the terms of the swap, Torrey includes the following information in the report:

* Implicit in the currency swap under consideration is a swap spread of 75 basis points over 2-year U.S. Treasury securities. This represents a 10 basis point narrowing of the spread as compared to this time last year. Thus, we can assume that the credit risk of the global credit market has decreased. Unfortunately, the decline provides no insight into the credit risk of the individual currency swap with GHS Bank, which could have increased.

* In order to decrease the counterparty default risk on the currency swap, we will need to utilize credit derivatives between the beginning and midpoint of the swap's life when this particular risk is at its highest. This is a significantly different strategy than we normally use with interest rate swaps. For interest rate swaps, counterparty default risk peaks at the middle of the swap's life, at which point we utilize credit derivative countermeasures to offset the risk.

* Because currency swaps almost always include netting agreements and interest rate swaps can be structured to include mark-to-market agreements, we can significantly reduce the credit risk of these swap instruments by negotiating swap contracts that include these respective features. When negotiating these features is not possible, credit risk can be reduced by using off-market swaps that do not require an initial payment from IRI.

Six months have passed (180 days) since Torrey issued his report to IRI's management team, and the current exchange rate is now \$0,085 per peso. The new term structure of interest rates is as follows:

<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
180 days	4.2%	5.0%
540 days	4.8%	5.2%

Calculate the value of the 2-year currency swap from the perspective of the counterparty paying dollars six months after Torrey's initial analysis.

Options:

- A- -\$0.72 million.
- B- -\$3.21 million.
- C- -\$4.21 million.

Answer:

C

Explanation:

Use the new Mexican term structure to derive the present value factors:

$$Z_{180}(360) = 1 / [1 + 0.050(180 / 360)] = 0.9756$$

$$Z_{180}(720) = 1 / [1 + 0.052(540 / 360)] = 0.9276$$

The present value of the fixed payments plus the principal is:

$$0.0507 \times (0.9756 + 0.9276) + 0.9276 = 1.0241 \text{ per peso}$$

Apply this to notional principal and convert at current exchange rate:

$$1.0241 \times (\$100M / 0.0893) \times 0.085 = \$97.48 \text{ million}$$

The value of the swap is the difference between this value and the pay dollar fixed present value derived in the previous question:

\$97

$$.48 - \$101.69M = - \$4.21 \text{ million (Study Session 17, LOS 61 A)}$$

Question 10

Question Type: MultipleChoice

Rock Torrey, an analyst for International Retailers Incorporated (IRI), has been asked to evaluate the firm's swap transactions in general, as well as a 2-year fixed for fixed currency swap involving the U.S. dollar and the Mexican peso in particular. The dollar is Torrey's domestic currency, and the exchange rate as of June 1, 2009, was \$0.0893 per peso. The swap calls for annual payments and exchange of notional principal at the beginning and end of the swap term and has a notional principal of \$100 million. The counterparty to the swap is GHS Bank, a large full-service bank in Mexico.

The current term structure of interest rates for both countries is given in the following table:

<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
360 days	4.0%	5.0%
720 days	4.5%	5.2%

Torrey believes the swap will help his firm effectively mitigate its foreign currency exposure in Mexico, which stems mainly from shopping centers in high-end resorts located along the eastern coastline. Having made this conclusion, Torrey begins writing his report for the management of IRI. In addition to the terms of the swap, Torrey includes the following information in the report:

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* In order to decrease the counterparty default risk on the currency swap, we will need to utilize credit derivatives between the beginning and midpoint of the swap's life when this particular risk is at its highest. This is a significantly different strategy than we normally use with interest rate swaps. For interest rate swaps, counterparty default risk peaks at the middle of the swap's life, at which point we utilize credit derivative CQuintermeasures to offset the risk.

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Six months have passed (180 days) since Torrey issued his report to IRI's management team, and the current exchange rate is now \$0,085 per peso. The new term structure of interest rates is as follows:

<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
180 days	4.2%	5.0%
540 days	4.8%	5.2%

Calculate the present value of the dollar fixed payments for the tw year currency swap six months after Torrey's initial analysis.

Options:

A- \$93.28 million.

B- \$101.69 million.

C- \$108.80 million.

Answer:

B

Explanation:

Using the new U.S. term structure to derive the present value factors:

$$Z_{180}(360) = 1 / [1 + 0.042(180 / 360)] = 0.9794$$

$$Z_{180}(720) = 1 / [1 + 0.048(540 / 360)] = 0.9328$$

The present value of the fixed payments plus the \$100M principal is:

$$\$4.4M \times (0.9794 + 0.9328) + \$100M \times 0.9328 = \$101.69 \text{ million}$$

(Study Session 17, LOS 6I.d)

Question 11

Question Type: MultipleChoice

Rock Torrey, an analyst for International Retailers Incorporated (IRI), has been asked to evaluate the firm's swap transactions in general, as well as a 2-year fixed for fixed currency swap involving the U.S. dollar and the Mexican peso in particular. The dollar is Torrey's domestic currency, and the exchange rate as of June 1, 2009, was \$0.0893 per peso. The swap calls for annual payments and exchange of notional principal at the beginning and end of the swap term and has a notional principal of \$100 million. The counterparty to the swap is GHS Bank, a large full-service bank in Mexico.

The current term structure of interest rates for both countries is given in the following table:

<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
360 days	4.0%	5.0%
720 days	4.5%	5.2%

Torrey believes the swap will help his firm effectively mitigate its foreign currency exposure in Mexico, which stems mainly from shopping centers in high-end resorts located along the eastern coastline. Having made this conclusion, Torrey begins writing his report for the management of IRI. In addition to the terms of the swap, Torrey includes the following information in the report:

* Implicit in the currency swap under consideration is a swap spread of 75 basis points over 2-year U.S. Treasury securities. This represents a 10 basis point narrowing of the spread as compared to this time last year. Thus, we can assume that the credit risk of the global credit market has decreased. Unfortunately, the decline provides no insight into the credit risk of the individual currency swap with GHS Bank, which could have increased.

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credit derivative CQuntermeasures to offset the risk.

* Because currency swaps almost always include netting agreements and interest rate swaps can be structured to include mark-to-market agreements, we can significantly reduce the credit risk of these swap instruments by negotiating swap contracts that include these respective features. When negotiating these features is not possible, credit risk can be reduced by using off-market swaps that do not require an initial payment from IRI.

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<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
180 days	4.2%	5.0%
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Evaluate Torrey's statements regarding IRPs ability to mitigate the credit risk inherent in currency swaps and interest rate swaps. Torrey is only correct regarding:

Options:

A- netting agreements.

B- mark-to-markcl agreements.

C- off market swap contracts.

Answer:

B

Explanation:

Torrey is only correct regarding mark-to-market agreements. Using mark-to-market agreements for interest rate swaps will reduce credit risk by periodically computing the value of the swap and then requiring payment of that amount by one of the counterparties. At some predetermined time, the swap is revalued according to the new term structure of interest rates, and one party pays the other party any amount due. The swap is then repriced, essentially creating a new swap with no credit risk. Netting payments is also an effective way to reduce credit risk in interest rate and equity swaps. However, currency swap payments are generally not netted. Torrey has incorrectly stated that netting is almost always used in currency swaps. Using off-market swaps is not generally a method to reduce credit risk. If IRI enters into an off-market swap in which they do not owe a payment, then a payment is owed to IRI by the counterparty. This would actually increase credit risk since the counterparty could potentially default on the initial payment. (Study Session 17, LOS 61A)

Question 12

Question Type: MultipleChoice

Rock Torrey, an analyst for International Retailers Incorporated (IRI), has been asked to evaluate the firm's swap transactions in general, as well as a 2-year fixed for fixed currency swap involving the U.S. dollar and the Mexican peso in particular. The dollar is Torrey's domestic currency, and the exchange rate as of June 1, 2009, was \$0.0893 per peso. The swap calls for annual payments and exchange of notional principal at the beginning and end of the swap term and has a notional principal of \$100 million. The counterparty to the swap is GHS Bank, a large full-service bank in Mexico.

The current term structure of interest rates for both countries is given in the following table:

<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
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Torrey believes the swap will help his firm effectively mitigate its foreign currency exposure in Mexico, which stems mainly from shopping centers in high-end resorts located along the eastern coastline. Having made this conclusion, Torrey begins writing his report for the management of IRI. In addition to the terms of the swap, Torrey includes the following information in the report:

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<i>Time Period</i>	<i>U.S. Interest Rates</i>	<i>Mexican Interest Rates</i>
180 days	4.2%	5.0%
540 days	4.8%	5.2%

Determine whether the excerpt from Torrey's report regarding the timing of peak credit risk is correct with regard to currency swaps and interest rate swaps.

Options:

- A- Torrey is only correct regarding currency swaps.
- B- Torrey is only correct regarding interest rate swaps.
- C- Torrey is correct regarding both currency and interest rate swaps.

Answer:

B

Explanation:

The assumption is that the credit risk is low at the beginning of the swap because each counterparty accepted the creditworthiness of the other in order to initiate the transaction. By the middle of the swap's life, payments are coming due and credit risk increases. In interest rate swaps, the credit risk would then decline as the remaining payments were made towards the end of the swap's life. For currency swaps, however, with the exchange of notional principal, the final payment keeps credit risk high through the end of the swap life, causing it to peak between the middle and the end of the swap's life. (Study Session 17, LOS 6I.i)

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