

Sample Level III Item Set Questions

The following questions relate to Patricia Jollie.

Patricia Jollie, CFA, is the fixed-income analyst and portfolio manager at Mahsud Financial Corporation, a small investment firm.

On 5 April, a friend who works for a bond-rating agency mentions to Jollie that a bond the agency is analyzing will experience a rating change. That bond also happens to be in Mahsud Financial's portfolios. Not wanting to trade ahead of the rating change announcement, Jollie decides to wait for distribution of the information through her friend's scheduled interview on a business television program the afternoon of 8 April. On the morning of 8 April, the information is released on a worldwide financial news service. Jollie immediately changes her mind about waiting for the interview and trades the bonds in Mahsud Financial's portfolios.

On 8 April, Jollie also trades a second bond to rebalance one of Mahsud Financial's portfolios. Jollie knows before executing her transaction that the bond is thinly traded. Although Jollie's trade will materially affect the bond's market price, it is not her intention to create price movement. A colleague witnesses the trade and large bond price change and says, "What a market overreaction; the bond price appears to be distorted now!" The colleague also points out to Jollie that Mahsud Financial's policy on market manipulation states: "Mahsud Financial employees must refrain from making transactions that distort security prices or volume with the intent to mislead market participants."

In conducting fixed-income research, Jollie believes that insight into prospective corporate bond returns can be derived from information that is also relevant to a company's stock. She spends several hours a week in equity investment chat rooms on the Internet, and she pays particular attention to the research reports posted by Jill Dean, CFA, a self-employed analyst, on www.JillDeantheIndependentAnalyst.com. Prior to writing each report, Dean is paid a flat fee by the companies whose stocks she researches, but she does not reveal this fact to readers of her reports. She produces reports only for those companies whose stocks she can legitimately give "buy" recommendations after conducting a thorough analysis. Otherwise, she returns the flat fee. Investors have come to recognize all her "buy" ratings as having a sound and reasonable basis.

Jollie considers Dean's summaries and forecasts to be very well-crafted. Dean has given Jollie written permission to use her summaries and forecasts, word for word and without attribution, in her own bond analysis reports. On occasion, Jollie has done so. In Dean's other Internet postings, she reports the results of relevant academic finance studies. Once Jollie learns of a study by reading Dean's postings, she often reads the original study and mentions the results in her own reports. Jollie always cites the original study only and does not reveal that she learned of the study through Dean.

Mahsud Financial occasionally sponsors seminars on ethics. In the most recent seminar, the main speaker made statements about the relationship between ethics and the law, and also about potential sources of conflict of interest for research analysts. The seminar speaker's statements were:

- Statement 1: An illegal action is unethical, and actions that are legal are ethically sound.
- Statement 2: For analysts, a major source of conflict of interest is potential profit resulting from a weak barrier between the employer's research department and investment banking department.
- Statement 3: For situations in which conflicts of interest cannot be avoided, Mahsud Financial's written compliance policy should include the following component: "For unavoidable conflicts of interest that the employee judges to be material, employees must disclose the conflicts of interest to clients prominently, and in plain language."
- Statement 4: On the matter of gifts that might impair employees' objectivity, Mahsud Financial's written compliance policy should also include the following component: "Employees must disclose to Mahsud Financial all client gifts regardless of value."
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1. Does Jollie violate CFA Institute Standards of Professional Conduct by trading on the news of the bond rating change?
 - A. No.
 - B. Yes, only because she possessed material nonpublic information.
 - C. Yes, only because she should have waited to trade until after her friend's television interview took place.
 - D. Yes, both because she possessed material nonpublic information and because she should have waited to trade until after her friend's television interview took place.

2. Are Jollie's 8 April trade of the second bond and Mahsud Financial's policy on market manipulation, respectively, consistent with CFA Institute Standards on market manipulation?
 - A. Both Jollie's 8 April trade of the second bond and Mahsud Financial's policy on market manipulation are consistent with CFA Institute Standards.
 - B. Jollie's 8 April trade of the second bond is inconsistent and Mahsud Financial's policy on market manipulation is consistent with CFA Institute Standards.
 - C. Jollie's 8 April trade of the second bond is consistent and Mahsud Financial's policy on market manipulation is inconsistent with CFA Institute Standards.
 - D. Both Jollie's 8 April trade of the second bond and Mahsud Financial's policy on market manipulation are inconsistent with CFA Institute Standards.

3. Does Dean violate CFA Institute Standards in preparing and disseminating her equity reports?
- A. No.
 - B. Yes, only by misrepresenting her recommendations as independent.
 - C. Yes, only by accepting payment from the companies on which she produces reports.
 - D. Yes, both by misrepresenting her recommendations as independent and by accepting payment from the companies she covers.

4. In preparing investment reports, does Jollie violate CFA Institute Standards with respect to her:

	<u>use of Dean's summaries and forecasts?</u>	<u>citation of studies found in Dean's Internet postings?</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

5. Are the seminar speaker's statements #1 and #2, respectively, correct?

	<u>Statement #1</u>	<u>Statement #2</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

6. Are the seminar speaker's statements #3 and #4, respectively, sufficient to meet the requirements of related CFA Institute Standards?

	<u>Statement #3</u>	<u>Statement #4</u>
A.	No	No
B.	No	Yes
C.	Yes	No
D.	Yes	Yes

Solutions for Patricia Jollie

1. A is correct. Jollie did not act on the material nonpublic information she possessed, and according to the Standards of Practice Handbook, “It is not necessary...to wait for the slowest methods of delivery.”
2. A is correct. Jollie’s transaction is a legitimate market order in a thinly-traded security, and Mahsud Financial’s policy statement is consistent with CFA Institute Standards relating to the Integrity of Capital Markets.
3. B is correct. It is not a violation to accept compensation from an issuer in exchange for research but such arrangements must be disclosed prominently and in plain language.
4. C is correct. Receiving Dean’s written permission does not absolve Jollie of her responsibility to provide attribution. Because Jollie uses the results of the research studies and does not use Dean’s interpretation of the studies, it is appropriate to cite the original authors only.
5. B is correct. The first statement is incorrect and the second statement is correct. What is legal is not necessarily ethical, and a weak barrier between the employer’s research department and investment banking department is a potential source of conflicts.
6. B is correct. Statement 3 is incorrect. The disclosure of a conflict should be made—prominently and in plain language—regardless of whether the member views the conflict as material, so the client can determine the materiality of the conflict. Gifts (the \$100 threshold is no longer applicable) from clients should be disclosed to the employer, which is responsible for determining whether the gift could affect the employee’s independence and objectivity. The Mahsud Financial requirement exceeds, and therefore meets, CFA Institute Standards.

The following questions relate to Catherine Gide.

Catherine Gide is the risk management director of the Millau Corporation, a large, diversified, French multinational corporation with subsidiaries in Japan, the United States, and Switzerland. One of Gide's primary responsibilities is to manage Millau's currency exposure. She has the flexibility to take tactical positions in foreign exchange markets if these positions are justified by her research. Gide and her assistant, Albert Darc, are meeting to discuss how best to deal with Millau's currency exposure over the next 12 months.

Specifically, Gide is concerned about the following:

1. Millau has just sold a Japanese subsidiary for 65 billion yen (JPY65,000,000,000). Because of an impending tax law change, Gide wishes to wait six months before repatriating these funds. Gide plans to invest the sale proceeds in six-month Japanese government securities and hedge the currency risk by using forward contracts. Gide's research indicates that the yen will depreciate against the euro (EUR) over the next six months. Darc has gathered the exchange rate and interest rate information given in Exhibit 1. The day-count convention is 30/360.
2. Millau has a contract to deliver computerized machine tools to a U.S. buyer in three months. A payment of 50 million U.S. dollars (USD50,000,000) is due from the buyer at that time. Gide is concerned about the dollar weakening relative to the euro. She plans to use options to hedge this currency exposure. Specifically, Gide expects the U.S. dollar to weaken to 1.2250USD/EUR in the next three months. Euro options quotations are given in Exhibit 2. All options are European-style and expire in three months.
3. Darc says to Gide:

"I believe the volatility of the USD/EUR exchange rate will soon increase by more than the market expects. We may be able to profit from this volatility increase by buying an equal number of at-the-money call and put options on the euro at the same strike price and expiration date."
4. Millau needs 100 million Swiss francs (CHF100,000,000) for a period of one year. Millau can issue at par a 2.8 percent one-year euro-denominated note with semiannual coupons and swap the proceeds into Swiss francs. The euro swap fixed rate is 2.3 percent and the Swiss franc swap fixed rate is 0.8 percent.

Darc tells Gide that he expects interest rates in both the euro currency zone and Switzerland to rise in the near future. Exchange rate and interest rate information is given in Exhibit 1.

Exhibit 1
Exchange Rate and Interest Rate Information

Currency Exchange Rates	Spot	3-month Forward	6-month Forward	1-year Forward
U.S. dollars per euro (USD/EUR)	1.1930	1.1970	1.2030	1.2140
Japanese yen per euro (JPY/EUR)	133.83	133.14	132.46	131.13
Swiss francs per euro (CHF/EUR)	1.5540	1.5490	1.5440	1.5340
Annualized Risk-free Interest Rates (%)	1 Month	3 Month	6 Month	1 Year
Euro area	2.110	2.120	2.130	2.150
United States	3.340	3.560	3.770	3.990
Japan	0.040	0.056	0.066	0.090
Switzerland	0.730	0.750	0.760	0.780

Exhibit 2
Euro Options Quotations
(options expire in 3 months)

Strike (USD/EUR)	Calls on Euro (USD/EUR)	Puts on Euro (USD/EUR)
1.1800	0.0275	0.0125
1.1900	0.0216	0.0161
1.2000	0.0169	0.0211
1.2100	0.0127	0.0278

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1. If Gide uses a six-month forward currency contract to convert the yen received from the sale of the Japanese subsidiary into euros, the total amount Millau will receive is *closest* to:
- A. EUR490,714,000.
 - B. EUR490,876,000.
 - C. EUR490,935,000.
 - D. EUR491,038,000.

2. If Gide uses a six-month forward currency contract to convert the yen received from the sale of the Japanese subsidiary into euros, the annualized return in euros that Millau will realize is *closest* to:
- A. 0.066%.
 - B. 2.064%.
 - C. 2.130%.
 - D. 2.196%.
3. Based on Gide's expectation for the USD/EUR rate in concern #2, Gide's *most* appropriate action with regard to the USD50,000,000 due in three months is to:
- A. remain unhedged.
 - B. buy euro puts with a strike price of 1.2100USD/EUR.
 - C. buy euro calls with a strike price of 1.1800USD/EUR.
 - D. buy euro puts with a strike price of 1.2100USD/EUR and sell euro calls with a strike price of 1.1800USD/EUR.
4. Darc's statement to Gide (in concern #3) about the option strategy to use in order to profit from a volatility increase of the euro/U.S dollar exchange rate is:
- A. correct.
 - B. incorrect, because he is describing a strategy that benefits only from a weakening euro.
 - C. incorrect, because he is describing a strategy that benefits only from a strengthening euro.
 - D. incorrect, because he is describing a strategy that benefits from low volatility in the exchange rate.
5. If Millau issues euro-denominated debt and enters into a fixed-rate currency swap (in concern #4), which of the following *best* describes transactions between Millau and the swap counterparty in six months? Millau pays the swap counterparty:
- A. EUR740,026 and receives CHF400,000.
 - B. EUR900,901 and receives CHF800,000.
 - C. CHF400,000 and receives EUR740,026.
 - D. CHF800,000 and receives EUR900,901.

6. Based on Darc's interest rate expectations for the euro currency zone and Switzerland, Gide's *best* choice is to structure the currency swap so that Millau pays interest at a:
- fixed rate and receives it at a fixed rate.
 - fixed rate and receives it at a floating rate.
 - floating rate and receives it at a fixed rate.
 - floating rate and receives it at a floating rate.

Solutions for Catherine Gide

- B is correct. Gide will invest the 65 billion yen for six months at 0.066% (refer to Exhibit 1). She will convert the yen to euros using the 6-month forward rate of 132.46. Solve $65,000,000,000 \times (1 + 0.00066 \times (180 / 360)) / 132.46 = 490,876,114$.
- C is correct. Assuming that interest parity holds, if Gide uses a six-month forward to convert the yen she should expect to earn the six-month euro rate of 2.13% as shown in Exhibit 1. As a check, you can convert 65 billion yen to euros at the spot exchange rate. Then, calculate the return associated with this number and the answer in question 40.1. To wit, solve $65,000,000,000 / 133.83 = 485,690,802$. Next, solve $490,876,114 / 485,690,802 = 1.01067616$. Annualizing this six-month HPR provides the answer of 2.13%.
- C is correct. If Gide remains unhedged and her expectation of a future exchange rate of 1.225 USD/EUR comes true, the \$50,000,000 will convert to €40,816,327. If she buys a call on the euro (the right to buy euros with dollars) with a strike of 1.18, her effective conversion rate will be 1.2075 (1.18 (the strike) + 0.0275 (the call premium)). Continuing, $50,000,000 / 1.2075 = 41,407,867$. This exceeds the expected amount of euros under the unhedged option. Answers B and D do not provide a hedge against a weaker dollar.
- A is correct. Darc's statement in comment #3 describes buying a straddle. A long straddle is one way to profit from an increase in volatility as the increase in volatility will, *ceteris paribus*, increase the values of both the put and the call.
- C is correct. In order to raise 100 million Swiss francs, Millau needs to issue bonds totaling €64,350,064 (divide 100 by the spot rate of 1.554). To convert the euros into Swiss francs, Millau could enter into a currency swap. In a currency swap, notional amounts are exchanged at initiation. In this case, Millau will pay €64,350,064 and receive 100 million in Swiss francs. Subsequent payments do not net as they are denominated in different currencies. Remembering to adjust the given swap rates for semi-annual payments, in six months Millau will pay $(0.008 / 2) \times 100,000,000 = 400,000$ Swiss francs and receive $64,350,064 \times (0.023 / 2) = 740,026$ euros.
- B is correct. Darc expects interest rates in the euro zone and in Switzerland to increase. Given such an expectation, the best swap would be to pay fixed and receive floating. If the expected increases come about, the amount paid remains fixed while the amount received increases.