



COLEGIO MAYOR DE NUESTRA SEÑORA DEL ROSARIO
Midterm # 3

Lecturer: José Vicente Romero Ch. - International Finance

Instructions: *Only Use the space provided for the answers. If you place your answer somewhere else it won't be graded. No cell-phones are allowed. No borrowing (pen, pencils, calculators, etc.) are allowed. You have 2.00 hours.*

Part I: Multiple Selection Questions – Derivatives (3.0 points)

1. Which of the following is *most* accurate regarding derivatives?
 - A) Exchange-traded derivatives are created and traded by dealers in a market with no central location.
 - B) Derivative values are based on the value of another security, index, or rate.
 - C) Derivatives have no default risk.
2. Over-the- counter derivatives:
 - A) are customized contracts.
 - B) have good liquidity in the over-the-counter (OTC) market.
 - C) are backed by the OTC Clearinghouse.
3. Which of the following is NOT an over-the-counter (OTC) derivative?
 - A) A futures contract.
 - B) A forward contract.
 - C) A bond option.
4. Which of the following definitions involving derivatives is *least* accurate?
 - A) An option writer is the seller of an option.
 - B) A call option gives the owner the right to sell the underlying good at a specific price for a specified time period.
 - C) An arbitrage opportunity is the chance to make a riskless profit with no investment.

5. Which of the following is *most likely* an exchange-traded derivative?

- A) Equity index futures contract.
- B) Bond option.
- C) Currency forward contract.

6. A derivative security:

- A) has a value based on another security or index.
- B) has no default risk.
- C) has a value based on stock prices.

7. A financial instrument that has payoffs based on the price of an underlying physical or financial asset is a(n):

- A) option.
- B) future.
- C) derivative security.

8. A derivative security:

- A) is one that is based on the value of another security.
- B) is like a callable bond.
- C) has a value dependent on the shape of the yield curve.

9. Which of the following statements regarding exchange-traded derivatives is NOT correct? Exchange-traded derivatives:

- A) are illiquid.
- B) often trade in a physical location.
- C) are standardized contracts.

10. Which statement does NOT characterize a forward contract?

- A) Valuation can be estimated at any point before maturity.
- B) Action is taken in the future.
- C) Regulation is not an issue.

11. Which of the following statements regarding a forward commitment is NOT correct? A forward commitment:

- A) is a contractual promise.
- B) can involve a stock index.
- C) is not legally binding.

12. A legally binding promise to buy 140 oz. of gold two months from now at a price agreed upon today is a(n):

- A) hedge.
- B) take-or-pay contract.
- C) forward commitment.

13. Typically, forward commitments are made with respect to all the following EXCEPT:

- A) inflation.
- B) equities.
- C) bonds.

14. Which of the following statements about forward and future contracts is *least* accurate?

- A) A predetermined price to be paid for a good is a necessary requirement in the terms of a forward contract.
- B) A future requires the contract purchaser to receive delivery of the good at a specified time.
- C) The primary difference between forwards and futures is that only futures are considered financial derivatives.

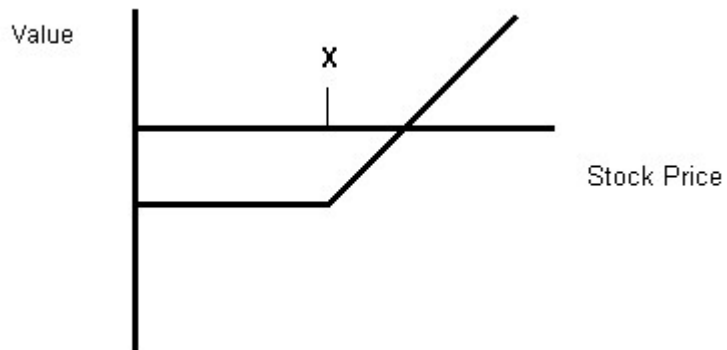
15. If an oil wholesaler expects to buy some gasoline for his customers in the future and wants to hedge his risk using a standardized and specific contract, he should:

- A) buy a crude oil forward contract.
- B) buy a crude oil futures contract.
- C) sell a crude oil futures contract.

16. If a farmer expects to sell his wheat in anticipation of a harvest and wants to hedge his risk, he needs to:

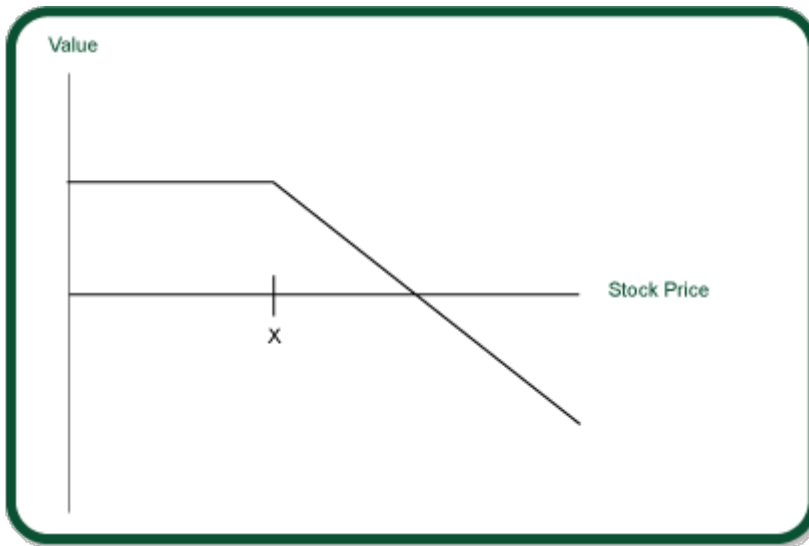
- A) sell wheat now.
- B) buy wheat futures contracts now.
- C) sell wheat futures contracts now.

17. The following value diagram illustrates a:



- A) long put option.
- B) short put option.
- C) long call option.

18. The following value diagram illustrates a:



A) short call option.

B) short put option.

C) long put option.

Part II: Equity (1.0 point)

1. On the Milan bourse, Fiat stock closed at EUR14.67 per share on Tuesday, February 26, 2008. Fiat trades as an ADR on the NYSE. One underlying Fiat share equals one ADR. On February 26, the \$/EUR spot exchange rate was \$1.4889/EUR1.00.

a. What is an ADR?

b. At this exchange rate, what is the no-arbitrage U.S. dollar price of one ADR?

c. By comparison, Fiat ADRs closed at \$21.94. Do you think an arbitrage opportunity exists?

Part III: Swaps (1.0 point)

1. A U.S. company needs to raise €50,000,000. It plans to raise this money by issuing dollar denominated bonds and using a currency swap to convert the dollars to euros. The company expects interest rates in both the United States and the euro zone to fall.

- a. Make a simple diagram of how the swap would look like. Should the swap be structured with interest paid at a fixed or a floating rate?
- b. Should the swap be structured with interest received at a fixed or a floating rate?

- a. The U.S. company would pay the interest rate in euros. Because it expects that the interest rate in the euro zone will fall in the future, it should choose a swap with a floating rate on the interest paid in euros to let the interest rate on its debt float down.
- b. The U.S. company would receive the interest rate in dollars. Because it expects that the interest rate in the United States will fall in the future, it should choose a swap with a fixed rate on the interest received in dollars to prevent the interest rate it receives from going down.