

Test Bank for
Derivatives: Principles & Practice

Chapter 1: Overview
Rangarajan K. Sundaram
Sanjiv R. Das
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1. Which class of derivatives have been blamed most widely for causing the financial crisis of 2008?
- (a) Equity derivatives.
 - (b) Interest-rate derivatives.
 - (c) Foreign exchange derivatives.
 - (d) Credit derivatives.

Answer d.

2. Which class of derivatives accounts for the largest dollar share in the world market in terms of notional amount outstanding?
- (a) Equity derivatives.
 - (b) Interest-rate derivatives.
 - (c) Foreign exchange derivatives.
 - (d) Credit derivatives.

Answer b.

3. A derivative security derives its value from an “underlying” security that is
- (a) Any other security.
 - (b) Other securities that are not derivatives.
 - (c) Securities that are related to the “underlying” security.
 - (d) None of the above.

Answer a.

4. Which of the following securities is not a derivative?
- (a) Call option on a stock.
 - (b) A bond issued by a BBB-rated corporate firm.
 - (c) Put option on a currency.
 - (d) A futures contract on oil.

Answer b.

5. A forward contract may be used for
- (a) Hedging price exposure at a future date.
 - (b) Speculating on price.
 - (c) Locking-in a price for a future transaction.
 - (d) All of the above.

Answer d.

6. A forward contract is struck at a forward price of \$40. At maturity the spot price of the asset is \$45. The short forward position earns the following payoff:

- (a) \$5
- (b) -\$5
- (c) \$45
- (d) -\$45

Answer b.

7. Which of the following statements is true when comparing the payoffs at maturity of a long forward contract with a long position in a call option, assuming the strike price of the option is the same as the delivery price in the forward contract?
- (a) The maximum (i.e., best-case) payoff of the forward contract exceeds that of the option.
 - (b) The minimum (i.e., worst-case) payoff of the forward contract exceeds that of the option.
 - (c) The minimum payoff of the option exceeds that of the forward contract.
 - (d) The maximum payoff of the option exceeds that of the forward contract.

Answer c.

8. Which of the following statements about forwards is false?
- (a) No payment is typically made at inception of a forward contract.
 - (b) A forward contract may be settled in cash at maturity.
 - (c) A futures contract is like a forward contract that is exchange-traded.
 - (d) The payoff at maturity from a long forward contract is always non-negative (either positive or zero).

Answer d.

9. Which of the following statements is true of forward contracts?
- (a) A forward contract has three parties: buyer, seller, exchange.
 - (b) There is no default risk in a forward contract.
 - (c) A forward contract is customizable and traded over-the-counter.
 - (d) A forward contract may be unilaterally revoked by the parties to the contract.

Answer c.

10. At maturity of the forward contract, the following is true of the spot price and delivery price locked-in using the forward contract:
- (a) The spot price is greater than the delivery price.
 - (b) The spot price is less than the delivery price.
 - (c) The spot price is equal to the delivery price.
 - (d) The spot price can be greater, equal to, or less than the delivery price.

Answer d.

11. State which of these statements is false.
- (a) A futures contract is traded on an exchange.
 - (b) A futures contract involves counterparty credit risk.
 - (c) A futures contract is fully customizable.
 - (d) A futures contract may be reversed unilaterally.

Answer c.

12. An option gives the buyer
- (a) The right but not the obligation to undertake the trade specified in the contract at maturity.
 - (b) The obligation but not the right to undertake the trade specified in the contract at maturity.
 - (c) The right to cancel the contract at any time prior to maturity.
 - (d) The same obligation as in a forward contract.

Answer a.

13. Which option gives the right to sell an asset at any time prior to or at maturity?
- (a) European call.
 - (b) American call.
 - (c) American put.
 - (d) European put.

Answer c.

14. An embedded option is one where the security contains features that are option-like. Which of the following is not an example of a security with an embedded option?
- (a) Callable bond.
 - (b) Convertible bond.
 - (c) Mortgages in the US.
 - (d) Preferred stock.

Answer d.

15. Consider hedging an exposure with (i) a futures contract, or (ii) an option with a strike price close to the futures price. The hedge with the futures contract
- (a) Has more cashflow uncertainty.
 - (b) Has no upfront cost.
 - (c) Has non-negative payoffs.
 - (d) Has more cashflows.

Answer b.

16. The following is not a point of difference between futures and forwards.
- (a) The futures payoff depends on the spot price of the asset at contract maturity.
 - (b) Futures are traded on an exchange.
 - (c) Futures have standardized terms.
 - (d) Default risk in a futures contract is borne by the exchange.

Answer a.

17. Which of the following statements is true of the value of European (E) options, American (A) options, and Bermudan (B) options?
- (a) $A > B > E$
 - (b) $A > E > B$
 - (c) $E > A > B$
 - (d) $B > A > E$

Answer a.

18. How many options does a callable, convertible bond contain?

- (a) 0
- (b) 1
- (c) 2
- (d) 3

Answer c. There are two options: (a) the issuer holds a call on the bond, and (b) the buyer has the right to convert the bond into equity. One may extend the idea and say that there is an additional option—the option to default held by the issuer of the convertible. If such a response is provided, then the correct answer would be 3 options, i.e., answer (d).

19. An investor enters into a forward contract to buy 4,000 barrels of oil in three months at \$80 a barrel. At the maturity of the contract, the spot price of oil is \$65 a barrel. The investor's payoff (gain/loss) from the forward contract is

- (a) A gain of \$60,000
- (b) A loss of \$60,000
- (c) A gain of \$260,000
- (d) A loss of \$260,000

Answer b.

20. A US-based exporter anticipated receiving €100 million in six months, and took a short forward position, locking-in an exchange rate of \$1.38/€. If after six months, at maturity, the exporter calculates that she has made a profit of \$2 million from the hedging strategy, the spot exchange rate at maturity must be

- (a) \$ 0.50/€.
- (b) \$ 1.36/€
- (c) \$1.40/€
- (d) \$ 2.00/€

Answer b.