

Test Bank for
Derivatives: Principles & Practice

Chapter 2: Futures Markets

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1. The most widely traded futures are of the following type:

- (a) Equity.
- (b) Interest rate.
- (c) Agricultural.
- (d) Commodity.

Answer b.

2. Which of the following features distinguish futures markets from forwards markets?

- (a) Standardization of contracts.
- (b) The use of margin accounts to manage risk.
- (c) Ease in reversing positions.
- (d) All of the above.

Answer d.

3. Which of the following types of orders does not involve specifying a price limit or trigger price as part of the order?

- (a) Stop order.
- (b) Market-if-touched order.
- (c) A fill-or-kill limit order.
- (d) A spread order.

Answer d.

4. A price tick is

- (a) The maximum amount by which the price can move in a day.
- (b) The minimum amount by which the price can move.
- (c) The bid-ask spread on the price.
- (d) The minimum amount of trading required on the exchange per trade.

Answer b.

5. Futures contracts are more likely to be cash-settled when

- (a) The asset underlying the contract is too costly to deliver physically.
- (b) There is no “underlying” for the futures contract.
- (c) There are more futures contracts in notional value than the physical stock of the underlying asset.
- (d) The maturity date of the futures is not the last day of the month.

Answer a. (Note that c is also sometimes specified as a possible reason, but is not always valid.)

6. When a counterparty to a futures contract fails to perform under the contract,
- (a) The futures exchange informs the party on the other side of the amount of loss they will bear.
 - (b) The futures exchange bears the loss,
 - (c) The futures exchange sues the failed counterparty.
 - (d) The futures exchange replaces the failed counterparty with a solvent one.

Answer b.

7. Plutonium is trading at a one-year futures price of \$5,000 per gram. A futures contract comprises 100 grams. The initial margin is \$100,000 and the maintenance margin is \$80,000. You are short one futures contract. There is a margin call when the price per gram of plutonium changes to
- (a) \$4,750
 - (b) \$4,900
 - (c) \$5,100
 - (d) \$5,250

Answer d.

8. A “stack-and-roll” strategy makes profits from the “roll” part when
- (a) The market is in backwardation.
 - (b) The market is in contango.
 - (c) There is a sharp fall in commodity prices.
 - (d) The correlation between long- and short-term futures prices is less than 0.5.

Answer a.

9. An investor enters into a long position in 10 gold futures contracts at a futures price of \$1000/oz and closes out the position at a price of \$1020/oz. If one gold futures contract is for 50 ounces, what are the investor’s gains or losses?
- (a) \$100
 - (b) \$1,000
 - (c) \$5,000
 - (d) \$10,000

Answer d.

10. Ignoring convenience yields, the theoretical futures price for a commodity with a positive cost of carry should typically exhibit
- (a) Backwardation.
 - (b) Contango.
 - (c) Either backwardation or contango depending on the delivery month.
 - (d) Either backwardation or contango depending on the initial level of the spot price.

Answer b

11. For a futures contract on an asset to be successful compared to the alternative of forward contracts, which of the following features would help?
- (a) The most appropriate standardized grade for the contract is difficult to identify.
 - (b) Counterparty credit risk is high.

- (c) Bid-ask spreads in the spot market are high.
- (d) The underlying spot asset is difficult to short.

Answer b.

12. March wheat futures are trading at \$4.20 a bushel and May wheat futures are trading at \$4.35 a bushel. You expect the spread between May and March futures prices to widen. To speculate on this view, you would

- (a) Go long March futures and short May futures.
- (b) Go long May futures and short March futures.
- (c) Go long May futures.
- (d) Go long March futures.

Answer b.

13. September corn futures are currently trading at \$3.80 a bushel while the spot price of corn is \$3.65 a bushel, so the “basis” (the futures price minus the spot price) is \$0.15 a bushel. If you expect the basis to weaken (i.e., to fall) significantly in the next few days, you can speculate on your view by

- (a) Going long the September futures contract.
- (b) Going long spot corn.
- (c) Going long spot corn and short September futures.
- (d) Going long September futures and short spot corn.

Answer c.

14. You go short oil 10 futures contracts on NYMEX when the futures price of oil is \$79 a barrel and close out your position three days later at a futures price of \$83 a barrel. One futures contract is for 1,000 barrels. Ignoring interest on the margin account, the futures trading has resulted in a

- (a) Gain of \$790,000.
- (b) Loss of \$4,000
- (c) Gain of \$4,000
- (d) Loss of \$40,000

Answer d.

15. The cheapest-to-deliver option

- (a) Hurts the holder of the long position in the futures contract.
- (b) Improves the quality of the position hedged by the futures.
- (c) Makes it easy to price the futures contract.
- (d) Makes it easier for market players to implement short squeezes.

Answer a.

16. The level of margining in a futures contract takes as an important input

- (a) The trading volume that underlies the contract.
- (b) The credit quality of counterparties trading in the futures market.
- (c) The volatility of the asset underlying the futures contract.
- (d) The difference between the initial and maintenance margin in the futures.

Answer c.

17. In the absence of arbitrage, the futures price at maturity should equal
- (a) The price at inception plus interest on the margin account for the period of the contract.
 - (b) The spot price of the underlying asset at that point.
 - (c) The price at inception plus the storage cost for the asset over the contract period.
 - (d) The price of the underlying asset minus a convenience yield.

Answer b.

18. A calendar spread futures position comprises
- (a) A long position in a futures contract of one maturity and a short position in another futures contract of a different maturity.
 - (b) A contract on the difference between two different-maturity futures prices.
 - (c) A portfolio of long futures contracts of different maturities.
 - (d) A portfolio of futures contracts spanning more than one year.

Answer a.

19. If the market is in backwardation
- (a) Spot prices are less than forward prices.
 - (b) Futures prices are less than forward prices.
 - (c) Spot prices are less than futures prices.
 - (d) None of the above.

Answer d.

20. When the futures-spot basis weakens
- (a) The difference between futures and spot prices drops.
 - (b) The correlation between changes in futures and spot prices drops.
 - (c) A hedger experiences more risk.
 - (d) A hedger loses money on the hedge.

Answer a.