

## Session 27

### Too good to be true? Pure Arbitrage

#### Test

- Which of the following do you need for pure arbitrage?
  - Two assets that have identical cash flows over time.
  - The two assets trade at different prices at the same point in time.
  - The trading costs for trading the two assets is less than the pricing difference.
  - At some point in time in the future, the price difference is guaranteed to disappear.
  - All of the above
- To get a storable commodity on a future date at a fixed price, you can buy a futures contract. If futures contracts are unavailable, which of the following sets of actions will allow you to create an equivalent position.
  - Borrow money for the contract period, buy the underlying asset today and store the asset until the future date.
  - Borrow money for the contract period and sell short the underlying asset, agreeing to deliver on the future date.
  - Sell short the underlying asset until the future date and lend the proceeds for the contract period.
  - Buy the underlying asset today and lend money for the contract period.
  - None of the above
- Which of the following is the arbitrage relationship for the futures price on a stock index?
  - Futures Price = Spot price
  - Futures Price = Spot price  $(1 + \text{Riskless rate} - \text{Dividend Yield})$
  - Futures Price = Spot price  $(1 - \text{Riskless rate} + \text{Dividend Yield})$
  - Futures Price = Spot price  $(1 + \text{Riskless rate} + \text{Dividend Yield})$
  - Futures Price = Spot price  $(1 - \text{Riskless rate} - \text{Dividend Yield})$Explain why.
- Assume that you are looking at a list of call and put options traded on a stock. If the stock price is \$36, which of the following options offers an immediate arbitrage profit?
  - Call with a strike price = \$40 and option value = \$3
  - Put with a strike price = \$40 and option value = \$3
  - Call with a strike price = \$30 and option value = \$8
  - Put with a strike price = \$30 and option value = \$4
  - None of the above
- Assume that you do find two “identical” assets trading at different prices at the same time in two different markets. Which of the following may be an impediment to profiting from pure arbitrage?
  - The assets may not be identical.
  - Trading on one of the markets may not be allowed.

- c. Transactions costs may exceed the pricing difference
- d. There may be no guarantee that the pricing difference will close at some point in time.
- e. All of the above