

SOLUTIONS

A) MULTIPLE CHOICE QUESTIONS (1 point each, no penalties, at least 5 to pass)

- 1 Considering mortgage loans, typically the level of fixed interest rates offered, compared to floating ones:
 - a is higher
- 2 Which of the following experiences larger impacts from sudden and wide changes in interest rates?
 - c growth stocks
- 3 Which of the following markets typically shows larger volumes?
 - d money markets
- 4 What is the main difference between venture capital and private equity funds?
 - b their target firms
- 5 The Sharpe ratio, in the case of mutual funds, allows comparisons based on...
 - a risk-adjusted returns
- 6 Insurers typically invest their largest share of assets in...
 - b bonds
- 7 Duration is a quick but effective measure of...
 - b interest rate risk
- 8 The EUR/USD exchange rate is 1. After a while, the USD appreciates. Therefore:
 - c The USD/EUR exchange rate is below 1
- 9 Which of the following is an example of moral hazard?
 - c A firm uses a mortgage loan's money to pay higher dividends
- 10 10 futures exist on a specific underlying. 1 expires, 2 are terminated, and 4 are sold to other participants. Therefore:
 - b the open interest went from 10 to 7

B) OPEN QUESTION (10 points, check your handwriting and don't exceed the space below)

Describe how the income statement of a commercial bank differs from an investment bank.

By mainly issuing loans and deposits a CB obtains a significant share of income from interest margins. This is not the case for IB. A CB frequently provides services, and even more of this is done by IB: the service margin is relevant for both. CBs do little proprietary trading compared to IB: the trading margin is therefore more relevant for IB. CBs need also to consider loan loss provisions, that IB have little concern about. A traditional CB also needs physical networks more than a IB: amortization is therefore significant. Finally, an IB has fewer employees than a CB (in relative terms), but are typically paid higher salaries: the role played by this expense is then different.

C) EXERCISE (10 points, briefly explain your calculations and don't exceed the space below)

Consider this order book for a stock. Then these occur: A) no-limit order of purchase for 10 stocks; B) limit order of sale for 20 stocks at 15; C) limit order of purchase for 15 stocks at 16. What is the book after this, and how big was the cashflow generated by these operations?

| | BID | | ASK | | |
|--|-----|----------------|----------------|----|--|
| | Q | P _K | P _K | Q | |
| | 10 | 15 | 15 | 5 | A) > SOLD at 15, > SOLD at 16 = CF 150 |
| | 20 | 12 | 16 | 10 | B) NO TRADE OCCURS |
| | | | | | C) all 15 SOLD at 15: CF 225 |
| | | | | | TOTAL CF: 375 |