

- 1 Financial intermediaries address the issue of transaction costs by...  
(d) all of the above
- 2 Which of the following is a limitation to the yield to maturity (YTM)?  
(b) in its basic configuration, it assumes flat yield curves
- 3 Behavioural finance helps us understanding...  
(d) all of the above
- 4 In an open market transaction, if the central bank wishes to increase the liquidity available to the market...  
(d) it purchases securities, typically government bonds
- 5 In the last year, a stock recorded a +10% performance. Therefore, investors holding this stock...  
(b) may have earned more or less, depending on when they purchased it and the actual price at that time
- 6 Compared to a mutual fund, an ETF with the same benchmark is typically...  
(a) cheaper
- 7 When interest rates rise, commercial banks can become more profitable if...  
(a) they are able to increase their returns on assets faster or wider than the cost of their liabilities
- 8 An insurance company's largest investment class is represented by...  
(a) bonds
- 9 In pensions, a pay-as-you-go system is featured by...  
(c) the immediate transformation of contributions into annuities
- 10 In mutual funds, the Sharpe, Sortino, Modigliani and Treynor ratios have one things in common:  
(d) they risk-adjust returns, in different ways

### Open question (in a nutshell)

Both channels allow the transfer of funds from lenders to borrowers. However, in the direct channel markets and intermediaries act as facilitators in the meeting between supply and demand, generally not taking risks from operations (f.i., in stock exchanges). Conversely, in the indirect channel, intermediaries offer their own assets to borrowers and/or their own liabilities to lenders, assuming the risks of the transformation between the two (liquidity, maturity, risk, etc., f.i. in banks).

### Exercise

If that was the YTM, then the present value of all future cashflows, discounted at 4%, would equal the current price.

$$PVCF1 = 5 / (1,04^1) = 4,81$$

$$PVCF2 = 5 / (1,04^2) = 4,62$$

$$PVCF3 = (105 / (1,04^3)) = 93,34$$

$$PVCF = 4,81 + 4,62 + 93,34 = 102,78$$

Since  $102,78 > 101$ , then the 4% is too low to be the actual YTM