1	The largest portion of financial markets, measured through volumes, belongs to ( a ) the indirect channel
2	Which of the following is a limitation to the use of duration in evaluating financial instruments? ( c ) it tends to overestimate the effect of interest rate changes due to its linearity
3	If we add together money markets of all currencies worldwide we obtain ( b ) the Forex
4	A repurchase agreement (REPO) is very similar to ( b ) a loan with pledged collateral
5	The typical intermediate target of a central bank is represented by ( d ) interest rates
6	The interest margin, as disclosed in profit and loss accounts of banks, is a typical measure for ( d ) how much traditional banking activities weight on profitability
7	Insurance companies hold, as an investment, especially ( a ) bonds
8	What is short selling? ( b ) borrowing and selling today an asset to be purchased in the future at a lower price
9	The "open interest", referred to the market for derivatives, indicates ( c ) the number of outstanding contracts that are not settled yet
10	In a credit default swap (CDS) the protection seller will make ( a ) only one payment or no payments at all

## Open question (in a nutshell)

Options are derivatives with an asymmetry between parties. One, in exchange for an upfront premium paid to the writer, has the right to buy (call) or sell (put) the underlying at a predetermined strike price at (or within) the exercise date. Many exotic variants are built on this simple structure. As a hedging instrument, they allow to fix the cost of a future purchase (f.i. if one fears the price of the underlying to grow) or stop the downside of a future selling (f.i. if one holds the underlying and wants to protect it from a price decrease).

## Exercise

Measure the NAV as of yesterday's close: 1) NAV yesterday:  $(1,000 \times 100 + 2,000 \times 75) / 1,000 = 250$ Calculate how many new shares the fund must issue and the total amount oustanding: 2) New shares: 5,000 / 250 = 20 --> total 1,000+20=1,020Calculate the new investment and the cash at hand: 3) New investment:  $5,000 / 30 = 166,7 --> 166 \times 30 = 4,980$  (20 in cash) Measure the NAV today: 4) NAV today:  $(1,000 \times 105 + 2,000 \times 73 + 166 \times 31 + 20) / 1,020 = 256.17$