

**1. The currency trader's quotation of the USD/EUR exchange rate for the client |
At what rate, you as his client, will you sell EUR expressed in USD?**

USD/EUR bid < ask (bid exchange rate has to be always lower than ask)

1.1824 1.1839

You will sell 1 EUR for the 1.1824 USD. (Trader buys => client sells at bid price)

has the following form: 1.1824/39 (bid/ask).

(is lower than ask exchange rate)

exchange rate)

2. The bank is quoting the following CZK bid and ask exchange rate. Calculate th

	bid	ask
EUR/CZK	0.0375	0.0425

$$\text{CZK/EUR}_{\text{BID}} \Rightarrow B(K/L) = \frac{1}{A(L/K)} = \frac{1}{0,0425 \text{ EUR/CZK}} = 23.52941 \text{ CZK/EUR}$$

$$\text{CZK/EUR}_{\text{ASK}} \Rightarrow A(K/L) = \frac{1}{B(L/K)} = \frac{1}{0,0375 \text{ EUR/CZK}} = 26.66667 \text{ CZK/EUR}$$

Bid has to be lower than Ask!!!

	BID	<	ASK
CZK/EUR	23.52941	<	26.66667

the bid and ask exchange rate for EUR (four decimal places).

$$A(K/L) = \frac{1}{B(L/K)} B(K/L) = \frac{1}{A(L/K)}$$

le rate and the spread in absolute and percentage terms.

$$S(L/K) = \frac{A(L/K) + B(L/K)}{2} \quad \% \text{ spread } (L/$$

USD/EUR

*100 = 0.0627%

$$'K) = \frac{A(L/K) - B(L/K)}{A(L/K)} * 100$$

4. The exchange rate of the euro (EUR) in the basic and current periods is specified as follows. Calculate the exchange rate of the Czech koruna (CZK) in both periods and the percentage change. Determine which currency has been appreciated and which has been depreciated.

E0 27.70 CZK/EUR
E1 26.14 CZK/EUR

$$\Delta \text{ EUR:} \quad = \frac{(26,14 \text{ CZK/EUR} - 27,7 \text{ CZK/EUR})}{27,7 \text{ CZK/EUR}} = -0.05632 \Rightarrow \Delta \text{ EUR in \%:}$$

Euro depreciated against Czech koruna by 5,63 %.

EUR/CZK exchange rate calculation:

E0 = $1/27,7 \text{ CZK/EUR}$ = 0.036101 EUR/CZK
E1 = $1/26,14 \text{ CZK/EUR}$ = 0.038256 EUR/CZK

$$\text{změna CZK:} \quad = \frac{(0,038256 \text{ EUR/CZK} - 0,036101 \text{ EUR/CZK})}{0,036101 \text{ EUR/CZK}} = 0.05968 \Rightarrow \Delta \text{ CZK in \%:}$$

Czech koruna appreciated against Euro by 5,97 %.

s follows.

ntage change in the foreign exchange rate in both cases.

$$\Delta S \% = \frac{S_1 - S_0}{S_0} * 100$$

-5.63%

5.97%

5. Škoda Auto company has expected income cash flows of 125 000 PLN from busines

CZK/PLN **6.2175** 6.3543 (we will sell the PLN to the deak

$$\text{Income cash flows in CZK} = 125\,000 \frac{\text{PLN} \times 6,2175 \text{ CZK}}{1 \text{ PLN}} = 777187.5 \text{ CZK}$$

s in Poland. What are the expected cash flows in CZK?

er at bid exchange rate)

6. Arcelor Mittal Tubular Products Karviná needs to buy 1 000 000 GBP to pay

CZK/GBP 29.8122 **29.8538** (we will buy the GBP f

$$\text{Costs in CZK} = 1\,000\,000 \frac{\text{GBP} \times 29,8538 \text{ CZK}}{1 \text{ GBP}} = \mathbf{29853800 \text{ CZK}}$$

y for the delivery. What will be the costs in CZK?

from the dealer at ask exchange rate)