

**A)** Relative PPP refers to rates of changes of price levels, that is, inflation rates. This proposition states that the rate of appreciation of a currency is equal to the difference in inflation rates between Germany and the United States. **Therefore, Euro will appreciate by 1% (difference between inflation indices in Germany and USA) by the end of the year → the exchange rate will be 2,02 USD for 1 EUR.**

**B)** Uncovered interest rate parity helps explain the determination of the spot exchange rate. The following equation represents uncovered interest rate parity.

$$(1 + i_{\$}) = \frac{E(S_{t+k})}{S_t} (1 + i_c)$$

where  $E(S_{t+k})$  is the expected future spot exchange rate at time  $t + k$ ,

$k$  is the number of periods into the future from time  $t$

$S_t$  is the current spot exchange rate at time  $t$

$i_{\$}$  is the interest rate in the US

$i_c$  is the interest rate in a foreign country

**In our case:  $1 + 0,05 = \frac{x}{2} \left(1 + \frac{1}{2}\right) \rightarrow x = 1,4$ . Therefore, exchange rate between US Dollar and Euro will be 1,4.**

**C)** The covered interest rate parity condition eliminates risk with the use of a forward market. CIRP equates the difference between interest rates to the forward premium.

**In our case, it will comprise 2% change of exchange rate up to 2.04 USD for 1 EUR.**