

1. If you want to have CZK 100,000 available in 2030 and expect a return of 8% per annum, how much do you need to invest today?
2. How much do you need to invest to have CZK 15,000 available in 2035 at an interest rate of 2% p.a. with continuous compounding?
3. At what interest rate would a current account at a savings bank A (interest is credited only once a year) have to earn interest to equal a current account at a bank B earning 5% per year? Interest is credited to bank A with monthly compounding.

Real Cash Flow & Real or Nominal Interest Rate

1. Calculate the real interest rate on deposits under the following conditions:
 - (a) interest is 4.5%, inflation rate is 3.7%.
 - (b) interest is 6.5%, inflation rate is 17.5%.
2. What will be the value (buying power) of a deposit of CZK 1 million? CZK in two years in the situation from the previous example?
3. What will be the fair value of a deposit of CZK 42,000 in 3 years at an interest rate of 4.5% and inflation of 6.3%?
4. Calculate the real interest rate from the data in the previous example and use it to solve the problem.
5. You want to dispose of 1 million CZK in 15 years. The nominal interest rate is 5.8% p.a. and the inflation rate is 10%.
 - a) How much do you need to deposit?
 - b) If you have 1 million CZK at home, what will be its fair value after 15 years?
6. We want a realistic amount of CZK 550,000 in 25 years. The nominal interest rate is 3.3% p.a. and the inflation rate is 5.1%. How much do you need to save today?
7. What will have 1 mil. CZK purchasing power in 30 years? The inflation is expected to be 5% annually.
8. Calculate the nominal interest rate if the inflation rate is 2.8% and the real interest rate is 0.8%.
9. Calculate the real interest rate if you receive CZK 1,115 for CZK 1,000 earned from the sale of goods at the end of the year and the price of the goods has risen to CZK 1,095.