

Interest Rate

NCEES® FE Reference Handbook Pages 230 - 231



STUDY FOR FE

Interest rates are generally provided on an annual basis with agreement on how often compounding will happen.

Compounding can occur daily, weekly, monthly, quarterly, annually etc.

Nominal Interest Rate (r): The 'stated' or annual interest rate without considering the effect of any compounding.

Interest rate per period (i): The nominal interest rate/year divided by the number of interest compounding period.

Effective interest rate (i_e): Annual interest rate reflecting the effect of multiple compounding periods.

Effective interest rate ' i_e ' can be calculated as shown below.

$$i_e = \left(1 + \frac{r}{m}\right)^m - 1$$

' m ' represents compounding periods per year and ' r ' is the annual interest rate.

Using incorrect interest rate is one of the most common mistakes!