

## Assignment - 6

Explain the ~~CAGR~~ CAGR

CAGR stands for Compound Annual Growth Rate. It is a financial metric that measures the rate of return on growth of an investment, function or metric over a specific period of time, usually years. CAGR takes into account the compounding effect of growth from one period to the next.

The formula to calculate CAGR:-

$$\text{CAGR} = \left( \frac{\text{End Value}}{\text{Beginning Value}} \right)^{\frac{1}{\text{No of Year}}} - 1$$

Where:-

- End value is the final value of the over time or metric
- Beginning Value is the initial value of the investment or metric
- Number of Year is the time period

over which the growth is measured.

For Example.

If a company's revenue grows from

1,50,000 over 3 years the CAGR would be

$$\text{CAGR} = \left( \frac{1,50,000}{1,00,000} \right)^{\frac{1}{3}} - 1 = 14.5\%$$



This means the company's revenue grow  
at an average rate 14.57% per year over the  
3-year period.

CAGR is useful for

1. Evaluating Investment Performance
  2. Comparing growth rate between Companies or Industries
  3. Setting growth target or benchmarks
  4. Analyzing historical growth trend
- Remember, CAGR is a smooth rate of growth so it may not reflect the actual year to year fluctuations.

*Pliny*