COMPONDED ANNUAL GROWTH RATE
Compounded Annual Growth Rate or CAGR is a method to calculate year-over-year growth rate of an investment over a specified period of time.
Let us see the formula of the Current Account Balance (CAB):

\[ \text{CAB} = \text{X} - \text{M} + \text{NI} + \text{NCT} \]

- \( \text{X} \): Exports of goods and services
- \( \text{M} \): Imports of goods and services
- \( \text{NI} \): Net income abroad (Salaries paid or received, credit / debit of income from FII & FDI etc.)
- \( \text{NCT} \): Net current transfers (Workers' Remittances (unilateral), Donations, Aids & Grants, Official Assistance and Pensions etc.)

CURRENT ACCOUNT DEFICIT

There are two popular methods of calculating returns:

1. Absolute returns
2. CAGR returns
Let’s understand this using a simple example.
Suppose you have invested Rs. 10,000 on 1st February, 2011. On 31st Jan 2014, your investment has grown to Rs. 20,000.

Using the absolute return method, you can say your money has doubled by 100% over the last 3 years.

\[
\text{Absolute Return} = \left( \frac{\text{End Value} - \text{Start Value}}{\text{Start Value}} \right) \times 100
\]

\[
= \left( \frac{Rs. 20,000 - Rs. 10,000}{Rs. 10,000} \right) \times 100
\]

\[
= 100\%
\]
CAGR however also takes into account the time period you remain invested.

\[
CAGR = \left( \frac{\text{End values}}{\text{start value}} \right)^{\frac{1}{\text{End date-start date}}} - 1 \right] \times 100
\]

\[
= \left( \frac{20000}{10000} \right)^{\frac{1}{3}} - 1 \right] \times 100
\]

\[
= 26\%
\]

This means your money grows 26% each year over the period of investment.
Absolute returns method does not consider the time period. Rs. 10000 growing to Rs. 20000 even after 1 year or 10 years would still be a growth of 100%.
Whereas CAGR would show a different figure for different time periods as it considers the investment period.

Hence your returns calculated using the CAGR method will be lower as compared to absolute returns.

CAGR is used to calculate returns if the time period exceeds a year. This is an important point to consider when making investment decisions.
Let us see the formula of the Current Account Balance (CAB):

$$\text{CAB} = \text{X} - \text{M} + \text{NI} + \text{NCT}$$

- **X** = Exports of goods and services
- **M** = Imports of goods and services
- **NI** = Net income abroad
  - Salaries paid or received, credit / debit of income from FII & FDI etc.
- **NCT** = Net current transfers
  - Workers' Remittances (unilateral), Donations, Aids & Grants, Official Assistance and Pensions etc.

CURRENT ACCOUNT DEFICIT

Hope this lesson would enable you to calculate and interpret CAGRs on your investments.
Please give us your feedback at professor@tataamc.com
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Mutual Fund investments are subject to market risks, read all scheme related documents carefully.