

SREERAM COACHING POINT, Chennai
Best Oral coaching classes at Chennai, Bangalore and Ernakulam

Stock Index computation

Stock Index such as BSE, NSE are calculated using a base-weighted aggregate methodology; that means the level of the Index reflects the total market value of all 50/200 component stocks relative to a particular base period. Statisticians refer to this type of index, one with a set of combined variables (such as price and number of shares), as a composite index.

Total market value of a company is determined by multiplying the price of the stock by the number of shares outstanding. An indexed number is used to represent the results of this calculation in order to make the value easier to work with and track over time. It is much easier to graph a chart based on indexed values than one based on actual values.

In practice, the daily calculation of the BSE/NSE are computed by dividing the total market value of the 50/200 companies in the Index by a number called the Index Divisor. By itself, the Divisor is an arbitrary number. However, in the context of the calculation of the BSE/NSE 50/200 Index, it is the only link to the original base period value of the Index. The Divisor keeps the Index comparable over time and is the manipulation point for all Index Maintenance adjustments.

An example of how an index is calculated, using three stocks for illustrative purposes, follows. First, a starting point-or base period-is selected. Next, the initial total market value of the three-stock index at the base period is calculated by first taking each company's number of outstanding shares and multiplying it by its price per share to determine the market value of each stock. Then, the three market values are added together. The total is the base period market value for the index. That total then is indexed (set equal to 10) and used to calculate the base period divisor. The base period divisor in this example (base period market value divided by base period index value) is 1,000,000.

Suppose that the next day the per-share price of each of the three stocks in our index goes up exactly 10%. Since there have been no changes in the number of shares outstanding,

SREERAM COACHING POINT, Chennai
Best Oral coaching classes at Chennai, Bangalore and Ernakulam

the market value of each company in the index also will go up 10%. That new market value is divided by the index divisor, which remained unchanged at 1,000,000. The new closing value of the index is 110, also exactly 10% higher than the previous day's closing value.

This three-stock example illustrates the exact steps used every day to calculate the BSE/NSE 50/200. The Index always is calculated by adding the market values of its 50/200 components and dividing that sum by the latest Index Divisor.

The closing SENSEX is computed taking the weighted average of all the trades on SENSEX constituents in the last 15 minutes of trading session. If a SENSEX constituent has not traded in the last 15 minutes, the last traded price is taken for computation of the Index closure. If a SENSEX constituent has not traded at all in a day, then its last day's closing price is taken for computation of Index closure. The use of Index Closure Algorithm prevents any intentional manipulation of the closing index value.