

METHOD OF CALCULATION OF SENSEX.

Formula :- $\text{Index divisor} \times \text{Free Float Market Capitalization}$

So, First we know about Index Devisor and Market Capitalization.

Market Capitalization: -

Many different types of investors hold the shares of a company! The Govt. may hold some of the shares. Some of the shares may be held by the “founders” or “directors” of the company. Some of the shares may be held by the FDI’ s etc.

Now, only the “open market” shares that are free for trading by anyone, are called the “free-float” shares. When we are calculating the Sensex, we are interested in these “free-float” shares! A particular company, may have certain shares in the open market and certain shares that are not available for trading in the open market. According the BSE, any shares that DO NOT fall under the following criteria, can be considered to be open market shares:

- Holdings by founders/directors/ acquirers which has control element
- Holdings by persons/ bodies with "controlling interest"
- Government holding as promoter/acquirer
- Holdings through the FDI Route
- Strategic stakes by private corporate bodies/ individuals
- Equity held by associate/group companies (cross-holdings)
- Equity held by employee welfare trusts
- Locked-in shares and shares which would not be sold in the open market in normal course.

A company has to submit a complete report about “who has how many of the company’s shares” to the BSE. On the basis of this, the BSE will decide the “free-float factor” of the company. The “free-float factor” is a very valuable number! If you multiply the “free-float factor” with the “market cap” of that company, you will get the “free-float market cap” which is the value of the shares of the company in the open market! A simple way to understand the “free-float market cap” would be, the total cost of buying all the shares in the open market!

index divisor:-

$\frac{\text{Base year/ days}}{\text{Market Capitalization}}$

Now, meaning of base year/ days, take any days or year sensex as base and market capitalization .it is unable to say what was the base year when BSE come into force.

Easy step to calculation

Step First: Find out the “free-float market cap” of all the 30 companies that make up the Sensex!

Step Second: Add all the “free-float market cap’s” of all the 30 companies!

Step third: Put it in given formula then you will get the Sensex value!

$\frac{\text{Base Year/ Days(sensex)}}{\text{Market capitalization}} \times \text{New capitalization}$
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Let be an example,

There are two companies (among 30 companies) R Ltd & A Ltd .

R Ltd: - issued share 5000, in which 2000 share are held by Promoters, and market price of share Rs. 125.

A Ltd.- issued share 10000, in which 5000 share are

Held by Promoters, and market price of share Rs. 250.

Total Market capital

Free Float Capitalization

R. Ltd. 5000X125 = 625000.00 3000X125 =375000.00

A. Ltd. 10000X 250=2500000.00 5000X250 =125000.00

Total 3125000.00 1625000.00

Let be base year 1982-83 Sensex was 5000 and market capitalization 1500000.00. then put it below formula and get new sensex.

$$\frac{\text{Base Year/ Days (sensex)}}{\text{Market capitalization}} \times \text{New capitalization}$$

$$\frac{5000}{1500000} \times 1625000.00$$

New sensex=5416.67

You may calculate, present sensex taking lastdays value of sensex and capitalization as base.

Please Note: Every time one of the 30 companies has a "stock split" or a "bonus" etc. appropriate changes are made in the "market cap" calculations.

Now, there is only one question left to be answered, which 30 companies, why those 30 companies, why no other companies?

The 30 companies that make up the Sensex are selected and reviewed from time to time by an "index committee". This "index committee" is made up of academicians, mutual fund managers, finance journalists, independent governing board members and other participants in the financial markets.

The main criteria for selecting the 30 stocks is as follows:

Market capitalization: The company should have a market capitalization in the Top 100 market capitalizations of the BSE. Also the market capitalization of each company should be more than 0.5% of the total market capitalization of the Index.

Trading frequency: The company to be included should have been traded on each and every trading day for the last one year. Exceptions can be made for extreme reasons like share suspension etc.

Number of trades: The scrip should be among the top 150 companies listed by average number of trades per day for the last one year.

Industry representation: The companies should be leaders in their industry group.

Listed history: The companies should have a listing history of at least one year on BSE.

Track record: In the opinion of the index committee, the company should have an acceptable track record.

Having understood all this, you now know how the Sensex is calculated. For detail contact me or follow me on facebook at ca.rs89@yahoo.com