UNIT II

SECURITY MARKET INDEX

Security Market Index

Meaning

In simple words we can say security market index means to measure the growth of value of a set of securities.

Sometimes, an index is just an arithmetic average, but, usually, it is basically a ratio where the current index value is divided by the index value of some base year—the **base market value**.

A market index is a hypothetical portfolio of investment holdings which represents a segment of the financial market..Investors follow different market indexes to gauge market movements. The three most popular stock indexes for tracking the performance of the U.S. market are the Dow Jones, S&P 500 and Nasdaq Composite.

An average is composed of equally weighted items. Within a stock index, each stock has a relative weight based on the stock's total market value. While a stock's relative weight within an index can change every day, a stock's weight within an average is always the same.

Index

A composite representing the value of a group of stocks.

An index is made up of similar stocks based on market capitalization, industry or company size. Upon selection of stocks, the index value is computed. Each stock will have a different price and price change in one stock would not be proportionately equal to the price change in another.

stock market index is a statistical measure which shows changes taking place in the stock market. To create an index, a few similar kinds of stocks are chosen from amongst the securities already listed on the exchange and grouped together.
The criteria of stock selection could be the type of industry, market capitalisation or the size of the company. The value of the stock market index is computed using values of the underlying stocks. Any change taking place in the underlying stock prices impact the overall value of the index.
If the prices of most of the underlying securities rise, then the index will rise and vice-versa.
In this way, a stock index reflects overall market sentiment and direction of price movements of products in the financial, commodities or any other markets.
Some of the notable indices in India are as follows:

a. Benchmark indices like NSE Nifty and BSE Sensex

b. Broad-based indices like Nifty 50 and BSE 100

c. Indices based on market capitalization like the BSE Smallcap and BSE Midcap

d. Sectoral indices like Nifty FMCG Index and CNX IT.

Security Market Indexes. A security market index is a means to measure the growth of value of a set of securities. Sometimes, an index is just an arithmetic average, but, usually, it is a ratio where the current index value is divided by the index value of some base year, the base market value

The two most common kinds of indices are – Price-weighted and market capitalization-weighted index.

There are approximately 5,000 U.S. indexes. The three most widely followed indexes in the U.S. are the S&P 500, Dow Jones Industrial Average, and Nasdaq Composite

The stock market index acts like a barometer which shows the overall conditions of the market. They facilitate the investors in identifying the general pattern of the market. Investors take the stock market as a reference to decide about which stocks to go for investing.

An index is made up of similar stocks based on market capitalization, industry or company size. Upon selection of stocks, the index value is computed. Each stock will have a different price and price change in one stock would not be proportionately equal to the price change in another. So, the value of the index value cannot be arrived at as a simple sum of the prices of all the stocks.
Here is when the importance of assigning weights to stocks comes into play. Each stock in the index is assigned a particular weightage based on its market capitalization or price. The weight represents the extent of the impact that the stock's price change has on the value of the index.

MARKET CAPITALIZATION: refers to the total market value of the stock of a company. It is calculated by multiplying the total number of outstanding stocks floated by the company with the share price of a stock. It, therefore, considers both the price as well as the size of the stock. In an index which uses market-cap weightage, the stocks are assigned weightage based on their market capitalization as compared to the total market capitalization of the index.
Suppose a stock has a market capitalization of Rs. 50,000 whereas the underlying index has a total market-cap of Rs. 1,00,000. Thus, the weightage given to the stock will be 50%.
It is important to note that market capitalization of a stock changes every day with the fluctuation in its price. Due to this reason, weightage of the stock would change daily. But usually such a change is marginal in nature. Moreover, the companies with higher market-caps get more importance in this method.
In India, free-float market capitalization is used by most of the indices. Here, the total number of shares listed by a company is not used to compute market capitalization. Instead, use only the amount of shares available for trading publicly. Consequently, it gives a smaller number than the market capitalization.

A capitalization-weighted (or "cap-weighted") index, also called a market-value-weighted index is a stock market index whose components are weighted according to the total market value of their outstanding shares. Every day an individual stock's price changes and thereby changes a stock index's value.

To find the value of a cap-weighted index, we can multiply each component's market price by its total outstanding shares to arrive at the total market value. The proportion of the stock's value to the overall total market value of the index components provides the weighting of the company in the index.

Market capitalization is the market price of a security time the number of shares outstanding. To calculate the value of a value-weighted index, sum the market capitalization for each company and divide it by a divisor which is set initially to make the index a round number.

$$\text{WEIGHT} = \frac{\text{MARKET CAPITALIZATION(COMPONENTS)}}{\text{TOTAL MARKET CAPITALIZTION}} \times 100$$

PRICE WEIGHTED AVERAGE: this method, the value of an index value is computed based on the stock price of a company rather than the market capitalization. Thus, the stocks which have higher prices receive greater weightages in the index as compared to the stocks which have lower prices. This method has been used in The Dow Jones Industrial Average in the US and the Nikkei 225 in Japan

A price-weighted index is a stock index in which each company included in the index makes up a fraction of the total index proportional to that company's share stock price per share. In its simplest form, adding the price of each stock in the index and dividing by the total number of companies determines the index's value. A stock with a higher price will be given more weight than a stock with a lower price and, therefore, will have a greater influence on the index's performance.

To calculate the value of a simple price-weighted index, find the sum of the share prices of the individual companies and divide by the number of companies. In some averages, this divisor is adjusted in order to maintain continuity in the event of stock splits or changes to the list of companies included in the index.

Price-weighted indexes are useful because the index value will be equal to (or at least proportionate to) the average stock price for the companies included in the index. This allows the construction of indexes that will track the average stock price performance of a specific sector or market.

PRICEINDEX=SUM OF ALL THE PRICES OF STOCKS WHICH ARE PART OF THE INDEX / NUMBER OF STOCKS IN INDEX.