



NSE Indices Limited

(Formerly known as India Index Services & Products Limited-IISL)

NIFTY100 Low Volatility 30 Index - Methodology Document

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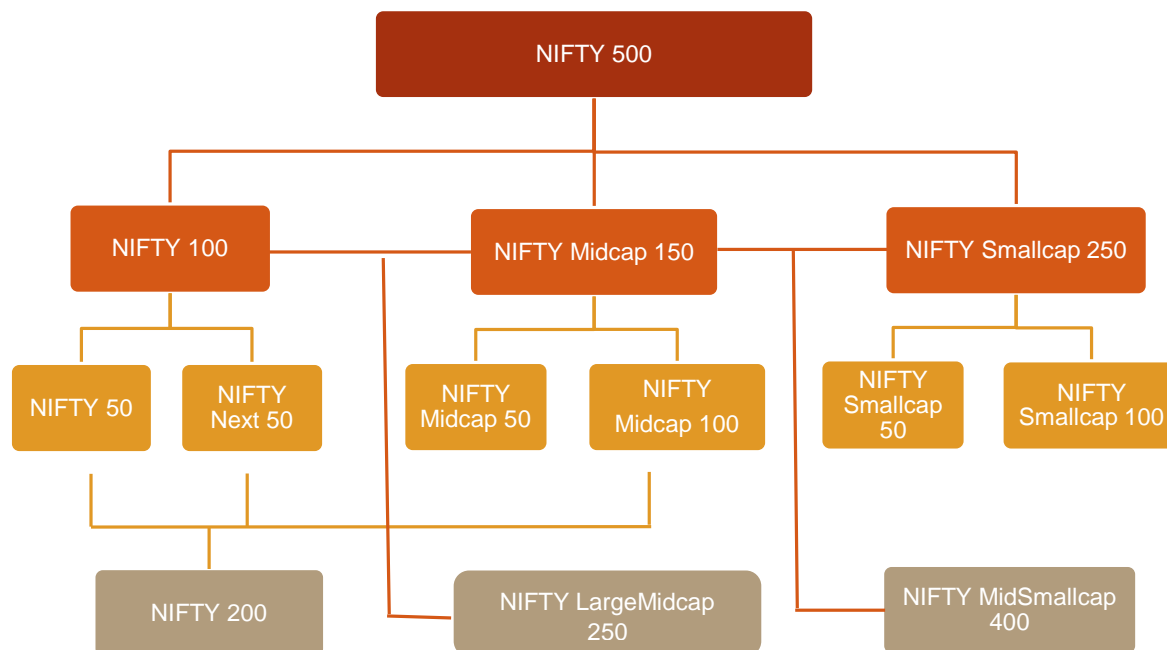
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Introduction

NSE Indices Limited (formerly known as India Index Services & Products Limited-IISL), a NSE group company, was setup in May 1998 to provide a variety of indices and index related services for the capital markets. NSE Indices Limited is India's specialised company focused upon the index as a core product. NSE Indices Limited maintains equity indices comprising broad-based benchmark indices, sectoral indices, strategy indices, thematic indices, fixed income and customised indices. Many investment and risk management products are developed on NSE Indices Limited indices in India and abroad. The 'NIFTY 50' index is widely tracked and traded as the benchmark for Indian Capital Markets.

NSE Indices Limited's objective is to develop, construct and maintain indices on Indian equities that serve as useful market performance benchmarks and can be useful underlying indices for investment products. In order to meet these objectives, NSE Indices Limited has enhanced the index methodology of broad equity indices. The index structure efficiently represents large, mid and small market capitalisation segments of the Indian capital market. Under this structure, there are 13 broad market indices as shown below:



NSE Indices Limited has developed NIFTY100 Low Volatility 30 Index from the NIFTY 100 Index forming part of the above structure. NIFTY 100 represents the large

market capitalisation segment at NSE. This document explains the methodology of the NIFTY100 Low Volatility 30 Index.

NIFTY100 Low Volatility 30 Index

NIFTY100 Low Volatility 30 Index aims to measure the performance of the low volatile securities in the large market capitalisation segment. The selection of securities and its weights in NIFTY100 Low Volatility 30 are based on volatility.

The methodology of NIFTY100 Low Volatility 30 is as under:

Eligible Universe:

- The securities forming part of NIFTY 100 are eligible for inclusion in the index
- Securities should have a minimum listing history of 1 year
- At the time of index reconstitution, a company which has undergone a scheme of arrangement for corporate event such as spin-off, capital restructuring etc. would be considered eligible for inclusion in the index if as on the cut-off date for sourcing data of preceding twelve months for index reconstitution, a company has completed twelve calendar months of trading period after the stock has traded on ex. basis subject to fulfilment of all eligibility criteria for inclusion in the index.
- Securities should be available for trading in derivative segment (F&O).
- DVR shares are not eligible for inclusion in the index

Selection Criteria:

- Stocks are assessed on the basis of volatility for index inclusion
- Volatility is calculated as the standard deviation of daily price returns (log normal) for last one year
- Eligible stocks are then ranked based on their volatility score, with stock having lowest volatility getting a rank of 1
- Top 30 ranked stocks with least volatility form part of the index

Rebalancing

Index maintenance plays a crucial role in ensuring the stability of the index. The indices are reconstituted on a quarterly basis. The replacement of stocks in the index (if any) is generally implemented from the first working day after F&O expiry of March, June, September and December.

Additional index reconstitution may be undertaken in case any of the index constituent undergoes a scheme of arrangement for corporate events such as merger, spin-off, compulsory delisting or suspension etc. The equity shareholders' approval to a scheme of arrangement is considered as a trigger to initiate the exclusion of such stock from the index through additional index reconstitution.

The review is carried out using data of six month period ending last trading day of February, May, August and November of each year respectively. Volatility is calculated using closing prices of last one year (adjusted for corporate actions) period ending last trading day of February, May, August and November for each review respectively.

At time of review, if the existing constituent of the index is ranked within top 60 based on the low volatility score, then the stock is retained in the index

Stocks based on lowest volatility rank gets included in the index, depending on the number of exclusions from the index due to above rule

Constituent Weights:

- In the first step, weight of the constituents are calculated based on the volatility

$$w = \frac{\frac{1}{Volatility}}{\sum_1^n \frac{1}{Volatility}}$$

- Weight of the stocks, having 6 month average turnover less than the stock with the lowest 6 month average turnover in NIFTY 50 Index, are capped at 3%. The

excess weight is distributed among the non-capped stocks in the proportion of their low volatility weights

- Weights of constituents are capped during the quarterly review. The weights of the constituent can change between the rebalancing periods due to the change in stock prices
- Quarterly rebalancing of weights is carried out considering the closing prices of the index constituents 5 working days prior to the effective date of the changes.

Base Value and Calculation Frequency:

The index has base value of 1000 and base date of April 1, 2005.

Corporate Actions:

Maintaining the index include monitoring and completing the adjustments for company additions and deletions, stock splits, stock dividends etc. Some corporate actions, such as stock splits and stock dividends, require changes only in the stock prices and shares of the companies in the index. Other corporate actions, such as special dividend and rights issue of shares require a divisor adjustment to prevent the value of the index from changing.

Adjusting the divisor for a change in market value leaves the value of the index unaffected by the corporate action. This helps keep the value of the index accurate as a barometer of stock market performance, and ensures that the movement of the index does not reflect the corporate actions of the companies in it. Divisor adjustments are made after the close of trading and after the calculation of the closing value of the index.

Index Governance:

A professional team at NSE Indices Limited manages the NIFTY indices. There is a three-tier governance structure comprising the board of directors of NSE Indices Limited, the Index Policy Committee, and the Index Maintenance Sub-committee. NSE Indices Limited has constituted the Index Policy Committee, which is involved in devising policy and guidelines for managing the NIFTY indices. The Index Maintenance Sub-committee decides on index rebalancing based on the index methodology. The NIFTY indices have fully articulated rules governing index revisions, corporate actions, etc.

Index Policy

Announcements:

All index-related announcements are posted on the websites of NSE Indices Limited and NSE. Changes impacting the constituent list are also posted on the Web site. Please refer to the www.niftyindices.com and www.nseindia.com.

Holiday Schedule:

For the calculation of indices, the NSE Indices Limited follows the official holiday schedule. A complete holiday schedule for the year is available on the NSE Indices Limited and NSE website. Please refer to the www.niftyindices.com and www.nseindia.com.

Index Recalculations

All NIFTY family of indices are recalculated whenever errors occur. Users of the NIFTY indices are notified through appropriate channel of communication.

Market Feedback & Index Methodology Review

NSE Indices Limited is committed to ensure that all NIFTY indices are relevant for the market participants. In order to ensure this, NSE Indices Limited on an on-going basis interacts with the stakeholders inviting the feedback through various channels of communication. The feedback received from the market participants forms a key input for all index related aspects.

Review of methodology of NIFTY indices is carried out on an annual basis. Additionally, NSE Indices Limited also considers any feedback that it may receive with regards to index methodology as part of on-going market interactions. Any changes to the index methodology is approved by the Committee and the same is announced through a press release.

Other

In case of a market stress or disruption, NSE Indices Limited will review and deal with the situation on consultative basis with the National Stock Exchange of India Ltd. (NSE) as NSE is source for price data for computation of equity indices.

All indices are expected to reflect the performance of a basket of stocks selected based on the defined guidelines and theme. Every index user is advised to evaluate the benefits of index and take an informed decision before using the index for self or creation of index-linked products. NSE Indices Limited does not accept any liability for any losses, claims, expenses etc. that may be incurred by any person as a result of usage of NIFTY family of indices as a result of reliance of the ground rules, any errors or inaccuracies.

About Us

About National Stock Exchange of India Limited (NSE):

The National Stock Exchange of India Ltd. (NSE) is the leading stock exchange in India and the third largest in the world by nos. of trades in equity shares in 2017, according to World Federation of Exchanges (WFE) report. NSE was the first exchange in India to implement electronic or screen based trading. It began operations in 1994 and is ranked as the largest stock exchange in India in terms of total and average daily turnover for equity shares every year since 1995, based on SEBI data. NSE has a fully-integrated business model comprising exchange listings, trading services, clearing and settlement services, indices, market data feeds, technology solutions and financial education offerings. NSE also oversees compliance by trading and clearing members with the rules and regulations of the exchange. NSE is a pioneer in technology and ensures the reliability and performance of its systems through a culture of innovation and investment in technology. NSE believes that the scale and breadth of its products and services, sustained leadership positions across multiple asset classes in India and globally enable it to be highly reactive to market demands and changes and deliver innovation in both trading and non-trading businesses to provide high quality data and services to market participants and clients.

For more information, please visit: www.nseindia.com

About NSE Indices Limited:

(Formerly known as India Index Services & Products Limited-IISL)

NSE Indices Limited, a subsidiary of NSE, provides a variety of indices and index related services for the capital markets. The company focuses on the index as a core product. The company owns and manages a portfolio of indices under the NIFTY brand of NSE, including the flagship index, the NIFTY 50. NIFTY equity indices comprises broad-based benchmark indices, sectoral indices, strategy indices, thematic indices and customised indices. NSE Indices Limited also maintains fixed income indices based on Government of India securities, corporate bonds, money market instruments and hybrid indices. Many investment products based on NIFTY indices have been developed within India and abroad. These include index based derivatives traded on NSE, Singapore Exchange Ltd. (SGX) and Taiwan Futures Exchange (TAIFEX) and a number of index funds and exchange traded funds. The flagship 'NIFTY 50' index is widely tracked and traded as the benchmark for Indian Capital Markets.

For more information, please visit: www.niftyindices.com

Contact Us

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