

MSCI India Domestic & World Healthcare 45 Index Methodology

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1 Introduction

The MSCI India Domestic & World Healthcare 45 Index (the "Index") aims to represent the performance of the securities from MSCI India Domestic IMI, as well as US listed securities of the companies in the MSCI World Index selected as below:

- The 25 largest securities from select sub-industries from the Healthcare sector in the MSCI India Domestic IMI ("MSCI India Domestic IMI Healthcare Select component"); and
- The 20 largest securities from select sub-industries from the Healthcare sector in the MSCI World Index ("MSCI World Healthcare Select component").

Additionally, capping is applied as per the MSCI Capped Indexes Methodology¹ to reduce concentration in the Index.

¹ For more details, please refer to the MSCI Capped Index Methodology at <u>https://www.msci.com/index-methodology</u>.



2 Constructing the MSCI India Domestic & World Healthcare 45 Index

MSCI India Domestic & World Healthcare 45 Index is constructed in following steps:

- Constructing the MSCI India Domestic IMI Healthcare Select Component
- Constructing the MSCI World Healthcare Select Component
- Combining the components
- Applying the capping

2.1 CONSTRUCTING THE MSCI INDIA DOMESTIC IMI HEALTHCARE SELECT COMPONENT

The MSCI India Domestic IMI Healthcare Select Component is constructed in following steps:

- Identifying the applicable universe
- Applying liquidity filters
- Applying the business segment filter
- Selecting securities with largest market cap
- Security Weighting

2.1.1 IDENTIFYING THE APPLICABLE UNIVERSE

Securities from the MSCI India Domestic IMI belonging to below Global Industry Classification Standard (GICS®) Sub-Industries constitute the Applicable Universe:

Sub-Industry Name	GICS Code
Pharmaceuticals	35202010
Health Care Services	35102015
Health Care Equipment	35101010
Health Care Distributors	35102010
Health Care Facilities	35102020
Biotechnology	35201010
Life Sciences Tools & Services	35203010



2.1.2 APPLYING LIQUIDITY FILTERS

Only securities with a 6-month Frequency of Trading² equal to or greater than 80% and a mean impact cost³ equal to or less than 1% over the previous 6 months are eligible for inclusion in the Index.

2.1.3 APPLYING BUSINESS SEGMENT REVENUE FILTER

Only companies for which their highest revenue contributing segment is classified under one of the target Standard Industrial Classification (SIC) Codes are eligible for inclusion in the Index.

Please refer to the Appendix for the list of target SIC codes.

2.1.4 SELECTING SECURITIES WITH LARGEST MARKET CAP

All the remaining eligible securities are ranked based on their full market capitalization and the top 25 securities are selected.

2.1.5 SECURITY WEIGHTING

Selected securities are then weighted according to their domestic free float-adjusted market capitalization.

2.2 CONSTRUCTING THE MSCI WORLD HEALTHCARE SELECT COMPONENT

The MSCI World Healthcare Select Component is constructed in following steps:

- Identifying the applicable universe
- Applying the liquidity filters
- Selecting alternate listing
- Selecting securities with largest market cap
- Security weighting

² For more details on the Frequency of Trading, please refer to the MSCI Global Investable Market Indexes Methodology at <u>https://www.msci.com/index-methodology</u>

³ For more details on the mean impact cost, please refer to the mean impact cost description at <u>https://www.bseindia.com/markets/equity/EQReports/impact_cost.htm</u>



2.2.1 IDENTIFYING THE APPLICABLE UNIVERSE

Securities from MSCI World Index belonging to below GICS® Sub-Industries constitute the Applicable Universe:

Sub-Industry Name	GICS Code
Pharmaceuticals	35202010
Health Care Equipment	35101010
Biotechnology	35201010
Life Sciences Tools & Services	35203010

2.2.2 APPLYING LIQUIDITY FILTERS

Only securities with a 6-month Frequency of Trading equal to or greater than 80% and a 6-Month FIF-Adjusted Annual Traded Value Ratio (ATVR)⁴ equal to or greater than 15% (with a buffer of 33.33%, for existing constituents) are eligible for inclusion in the Index.

2.2.3 SELECTING ALTERNATE LISTING

Securities of the companies with country classification outside the USA, are replaced by eligible alternate listings in the USA, if available. If no eligible alternate listing is available, the security is excluded from the eligible universe. An alternate listing is eligible only if it passes the screens below:

- listing in one of the eligible exchanges⁵ in the USA
- 6-Month FIF Adjusted Annual Traded Value Ratio Six Months equal to or greater than 15% (10% for existing constituents)
- 6-Month Frequency of Trading equal to or greater than 80%

2.2.4 SELECTING SECURITIES WITH LARGEST MARKET CAP

All the remaining eligible securities are ranked based on their full market capitalization and the top 5 securities from each GICS® Sub-Industry are selected.

⁴ For more details on ATVR, please refer to the MSCI Global Investable Market Indexes Methodology at <u>https://www.msci.com/index-methodology</u>

⁵ For more details on the eligible exchanges, please refer to the Appendix I of the MSCI Global Investable Market Indexes Methodology at <u>https://www.msci.com/index-methodology</u>



2.2.5 SECURITY WEIGHTING

Selected securities are then weighted according to their foreign free float-adjusted market capitalization.

2.3 COMBINING THE COMPONENTS

The MSCI India Domestic & World Healthcare 45 Index is constructed by combining the two component indexes in the below weighted proportions. The weight of the securities in the combined index are calculated as described in the Appendix II. In between the index reviews, the weights of securities fluctuate according to the market movements:

Component	Component Name	Component Weight
Component 1	MSCI India Domestic IMI Healthcare Select Component	70%
Component 2	MSCI World Healthcare Select Component	30%

2.4 APPLYING THE CAPPING

The maximum weight of the securities in the Index is capped at 20% as per the MSCI Capped Indexes Methodology.



3 Maintaining the MSCI India Domestic & World Healthcare 45 Index

3.1 QUARTERLY INDEX REVIEWS

The MSCI India Domestic & World Healthcare 45 Index is rebalanced on a quarterly basis effective at the open of the last business day of March, June, September and December.

The pro forma Index is, in general, announced five business days before the effective date.

3.1.1 BUFFER RULES

To reduce Index turnover and enhance Index stability, buffer rules are applied while selecting top securities based on full market capitalization. A buffer of 20% of the target number of constituents is applied while selecting 25 securities in the MSCI India Domestic IMI Healthcare Select Component. Eligible securities with a full market capitalization rank at or above 20 are added to the MSCI India Domestic IMI Healthcare Select Component on a priority basis. The existing constituents that have a rank between 21 and 30 are then successively added until the number of securities reaches 25. If the number of securities is below 25 after this step, the remaining eligible securities with highest rank are added until the number of securities in the component reaches 25. Similarly, a buffer of 50% is applied while selecting top 5 securities from each eligible sub-industry in the MSCI World Healthcare Select component.

3.2 APPLYING THE CAPPING

Weight of the MSCI World Healthcare Select Component in the Index is checked at the open of the last business day of each month and is capped at 32.3% if it is more than 34%.

3.3 ONGOING EVENT-RELATED CHANGES

The following section briefly describes the treatment of common corporate events within the MSCI India Domestic & World Healthcare 45 Index.

No new securities will be added (except where noted below) to the indexes between Index Reviews. For cases where additions are noted below, securities will be added to the indexes only if added to the Parent Index.

Parent Index deletions will be reflected simultaneously.



EVENT TYPE	EVENT DETAILS
New additions to the Parent Index	A new security added to the Parent Index (such as IPO and other early inclusions), will not be added to the index.
Spin-Offs	All securities created as a result of the spin- off of an existing index constituent will be added to the index at the time of event implementation.
Merger/Acquisition	For Mergers and Acquisitions, the acquirer's post event weight will account for the proportionate amount of shares involved in deal consideration, while cash proceeds will be invested across the index.
	If an existing Index constituent is acquired by a non-Index constituent, the existing constituent will be deleted from the index and the acquiring non-constituent will not be added to the index.
Changes in Security Characteristics	A security will continue to be an index constituent if there are changes in characteristics (country, sector, size segment, etc.). Reevaluation for continued inclusion in the index will occur at the subsequent Index Review.

Further detail and illustration regarding specific treatment of corporate events relevant to this index can be found in the MSCI Corporate Events Methodology book.

The MSCI Corporate Events methodology book is available at: <u>https://www.msci.com/index-methodology.</u>



Appendix I: Target SIC Codes

Only the securities for which the highest revenue contributing segment belongs to one of the below SIC Codes are eligible for selection to the Index:

SIC Code	SIC Code Description
2833	MEDICINAL CHEMICALS AND BOTANICAL PRODUCTS
2834	PHARMACEUTICAL PREPARATIONS
2835	IN VITRO AND IN VIVO DIAGNOSTIC SUBSTANCES
2836	BIOLOGICAL PRODUCTS, EXCEPT DIAGNOSTIC SUBSTANCES
3841	SURGICAL AND MEDICAL INSTRUMENTS AND APPARATUS
3842	ORTHOPEDIC, PROSTHETIC, AND SURGICAL APPLIANCES AND SUPPLIES
3843	DENTAL EQUIPMENT AND SUPPLIES
3844	X-RAY APPARATUS AND TUBES AND RELATED IRRADIATION APPARATUS
3845	ELECTROMEDICAL AND ELECTROTHERAPEUTIC APPARATUS
3851	OPHTHALMIC GOODS
5047	MEDICAL, DENTAL, AND HOSPITAL EQUIPMENT AND SUPPLIES
5048	OPHTHALMIC GOODS
5122	DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES
5912	DRUG STORES AND PROPRIETARY STORES
8011	OFFICES AND CLINICS OF DOCTORS OF MEDICINE
8021	OFFICES AND CLINICS OF DENTISTS
8042	OFFICES AND CLINICS OF OPTOMETRISTS
8049	OFFICES AND CLINICS OF HEALTH PRACTITIONERS, NOT ELSEWHERE CLASSIFIED
8051	SKILLED NURSING CARE FACILITIES
8052	INTERMEDIATE CARE FACILITIES
8059	NURSING AND PERSONAL CARE FACILITIES, NOT ELSEWHERE CLASSIFIED
8062	GENERAL MEDICAL AND SURGICAL HOSPITALS
8063	PSYCHIATRIC HOSPITALS
8069	SPECIALTY HOSPITALS, EXCEPT PSYCHIATRIC
8071	MEDICAL LABORATORIES
8072	DENTAL LABORATORIES
8082	HOME HEALTH CARE SERVICES
8092	KIDNEY DIALYSIS CENTERS



SIC Code	SIC Code Description
8093	SPECIALTY OUTPATIENT FACILITIES, NOT ELSEWHERE CLASSIFIED
8099	HEALTH AND ALLIED SERVICES, NOT ELSEWHERE CLASSIFIED
8731	COMMERCIAL PHYSICAL AND BIOLOGICAL RESEARCH



Appendix II: Determining the Weight of the Constituents in the Combined Index

At each rebalance, the weight of each of the securities in the combined Index is determined based upon:

- the security's weight in each underlying Component;
- the weight of each underlying Component in the Index.

Security weights can be calculated as follows:

$$W_{Sec_{i}}^{CI} = \sum_{C_{j}} W_{C_{j}}^{CI} \times W_{Sec_{i}}^{C_{j}}$$

Where:

- $W_{Sec_i}^{CI}$ is the weight of security Sec_i in the Index
- $W_{C_i}^{CI}$ is the target weight of the Component Index C_i in the Index
- $W_{Sec_i}^{C_j}$ is the weight of security Sec_i in the Index

For the ongoing maintenance of the Index, a Component Constraint Factor and a Full Market Cap Adjustment Factor is calculated for each Component and the Index constituent respectively, as described below.

Calculation of the Component Constraint Factor

The Component Index Constraint Factor is calculated for each Component Index as follows:

$$CCF_{C_{j}}^{CI} = \frac{W_{C_{j}}^{CI}}{\left(\frac{IndexMcap_{C_{j}}}{\sum_{C_{j}}IndexMcap_{C_{j}}}\right)}$$

Where:

- $CCF^{QM}_{C_{j}}$ is the Component Index Constraint Factor of the Component Index C_{j}



- ${\rm IndexMcap}_{C_j}$ is the index market capitalization of the Component Index C_j

Calculation of the Security Full Market Cap Adjustment Factor

The Full Market Cap Adjustment Factor for each security in the Composite Index is then calculated as follows:

$$\mathsf{FMCAF}^{\mathrm{CI}}_{\mathrm{Sec}_i} = \sum_{C_j} \mathsf{CCF}^{\mathrm{CI}}_{C_j} \times \mathsf{FMCAF}^{C_j}_{\mathrm{Sec}_i}$$

Where:

- $\mathsf{FMCAF}^{\mathsf{CI}}_{\mathsf{Sec}_i}$ is the Full Market Cap Adjustment Factor of security Sec_i in the Composite Index
- FMCAF^{C_j}_{Sec_i} is the Full Market Cap Adjustment Factor of security Sec_i in the Component Index C_i



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