

MSCI TOP 50 DIVIDEND INDEXES METHODOLOGY

November 2017



CONTENTS	1 In	troduction	3
CONTLINIS			
	2 Constructing the MSCI Top 50 Dividend Indexes		
	2.1	Applicable Universe	4
	2.2	Security Selection and weighting scheme	4
	3 In	dex Maintenance	6
	3.1	Annual Index Review	6
	3.2	Quarterly Index Review	6
	3.3	Weighting Scheme	7
	3.4	Ongoing Event Related Changes	8



1 INTRODUCTION

The MSCI Top 50 Dividend Indexes are designed to represent the performance of the top 50 securities in the Parent Index, ranked by dividend yield, that have increased or maintained their dividend per share compared to the previous year, or have increased or maintained their payout ratio if the dividend per share has dropped by no more than 10%.



2 CONSTRUCTING THE MSCI TOP 50 DIVIDEND INDEXES

2.1 APPLICABLE UNIVERSE

The applicable universe includes all the existing constituents of an underlying MSCI parent index (herein, a "Parent Index"). This approach aims to provide an opportunity set with sufficient liquidity and capacity. The relevant Parent Index would be any MSCI Regional or Country Index.

The fundamental data used is maintained monthly. MSCI uses dividend yield, 1-year dividend per share (DPS) growth, payout ratio and price data as of the end of the month preceding the Index Review, i.e., January, April, July and October. To get price return it also uses price data as of the end of twelve months preceding the Index Review.

Fundamental data as of the end of January, April, July and October respectively is used for each index review. The MSCI Top 50 Dividend Indexes are constructed from securities within the Parent Index that fulfill specific rules on dividend yield, dividend per share growth, payout ratio and price momentum as indicated in the following sections. Absence of relevant data renders the security ineligible for inclusion.

2.2 SECURITY SELECTION AND WEIGHTING SCHEME

The MSCI Top 50 Dividend Indexes are constructed with a fixed number of securities approach. For the initial construction of the Index, a selection universe of securities is created from the Parent Index using the following requirements:

- A minimum dividend yield of 5% and a maximum yield at 20%;
- 1-year dividend per share (DPS) growth greater than, or equal to, zero;¹
- A price return over the prior 12 months that is not in the bottom 5th percentile relative to the constituents of the Parent Index as of the previous end of month

The top 50 securities by dividend yield are then identified as potential constituents. The securities are weighted equally at initial construction subject to sector and country capping at 35%. A maximum of one security is selected per issuer. In case there are multiple securities of the same issuer, only the security with the highest dividend yield is eligible. If the sector or country weight exceeds the applicable capping, the lowest yielding security (or securities) from the most overweight sector/country is (are) substituted with the next highest yielding security (or securities). The process repeats until all sector and country

¹ Note that this requirement ensures, by definition, that the stock must have paid a dividend in each of the last two years



weights are within the applicable capping constraints. The sector weights are taken into consideration first followed by country weights.



3 INDEX MAINTENANCE

3.1 ANNUAL INDEX REVIEW

The annual review of the Top 50 Dividend Index coincides with the May Semi-Annual Index Review of the Parent Index. Changes are implemented as of close of the last business day of May. The pro forma indexes are announced nine business days before the effective date.

Existing constituents are given preference during the constituent selection process for the Annual Index Review. The existing constituents of the index are retained if they have:

- i. a dividend yield of at least 3%,
- ii. a 1-year DPS growth greater than or equal to zero
- iii. same or higher payout ratio change compared to the prior year if the 1-year DPS growth is between -10% and 0%.

In case there are multiple securities from the same issuer, only the security with the highest dividend yield amongst them is retained.

If the resulting number of securities in the index is less than 50, additional securities are then selected from the Parent Index in order of decreasing dividend yield as long as they

- i. have a dividend yield between 5% and 20%,
- ii. have a 1-year DPS growth greater than or equal to zero and
- iii. have a price return over the prior 12 months that is not in the bottom 5th percentile relative to the constituents of the Parent Index.
- iv. do not belong to an issuer for which another security is already part of the index.

If the total number of securities selected still does not reach 50, the minimum dividend yield threshold of 5% is reduced until the total number of securities equals 50.

The constituents are equal-weighted subject to sector and country capping at the Annual Review as described in Section 3.3.

3.2 QUARTERLY INDEX REVIEW

The quarterly index reviews of the Top 50 Dividend Index coincides with the February and August Quarterly Index Review and November Semi-Annual Index Review of the Parent Index. Changes are implemented as of close of the last business day of the month of the index review. The pro forma indexes are announced nine business days before the effective date.



Existing constituents are also given preference during the constituent selection process for the Quarterly Index Reviews. The existing constituents from the Index are retained if they have:

- i. a dividend yield of at least 3%,
- ii. a 1-year DPS growth greater than or equal to zero and
- iii. same or higher payout ratio change compared to the prior year if the 1-year DPS growth is between -10% and 0%.

In case there are multiple securities having the same issuer, only the security with the highest dividend yield amongst them is retained. If the resulting number of securities in the index is less than 50, additional securities are then selected from the Parent Index in order of decreasing dividend yield if they have a dividend yield between 5% and 20% and 1-year DPS growth greater than or equal to zero, and do not belong to an issuer for which another security is already part of the index .

If the total number of securities selected still does not reach 50, the minimum dividend yield threshold of 5% is reduced until the total number of securities equals 50.

The constituents are subject to sector and country capping at the Quarterly Index Review as described in Section 3.3.

3.3 WEIGHTING SCHEME

During the Annual Review, securities are weighted equally with country and sector capping of 35% each. If there is a breach of a country or sector cap, the lowest yielding securities from the relevant country or sector with the breach will be replaced by the next highest yielding securities from the selection universe (as per Section 2.2).

During the Quarterly Reviews, the existing securities are retained at their current weights. The sector and country weights are both capped at 35%. If there is a breach in the weight of a sector/country, the weight of the existing securities in that sector/country is capped at 35% and the additional weight is redistributed proportionally to other existing securities. In this process, the sector weights are taken into consideration first followed by the country weights. If there is a breach in sector weights while adjusting country weights, the process is repeated until both sector and country capping are in place. The new securities are now added to the index one by one with the country and sector caps till we reach 50 or we run out of eligible securities.



3.4 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the MSCI Top 50 Dividend Indexes aims to minimize turnover outside of Index Reviews. The methodology aims to appropriately represent an investor's participation in an event based on relevant deal terms and pre-event weighting of the index constituents that are involved. Further, changes in index market capitalization that occur as a result of corporate event implementation will be offset by a corresponding change in the Variable Weighting Factor (VWF) of the constituent.

Additionally, if the frequency of Index Reviews in the Parent Index is greater than the frequency of Index Reviews in the MSCI Top 50 Dividend Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the MSCI Top 50 Dividend Index.

The following section briefly describes the treatment of common corporate events within the MSCI Top 50 Dividend Indexes.

No new securities will be added (except where noted below) to the Index between Index Reviews. 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. Reevaluation for continued inclusion in the Index will occur at the subsequent Index Review.
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 under the sections detailing the treatment of events in Capped Weighted and Non-Market Capitalization Weighted indexes.

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



The following sections have been modified since September 2016:

• The details on the Corporate Events treatment are now included in Section 3.4.

The following sections have been modified since June 2017:

• Section 2.1 was expanded to include information about dates for which fundamental data is taken for index reviews.

The following sections have been modified since October 2017:

• Sections 2.1, 3.1 and 3.2 were expanded to include the additional constraint of the index having a maximum of a single security per issuer.



CONTACT US

AMERICAS

clientservice@msci.com

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
Sao Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Tokyo	+ 81 3 5290 1555

^{* =} toll free

ABOUT MSCI

For more than 40 years, MSCl's research-based indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research.

Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

MSCI serves 98 of the top 100 largest money managers, according to the most recent P&I ranking.

For more information, visit us at www.msci.com.

NOTICE AND DISCLAIMER

- This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redisseminated in whole or in part without prior written permission from MSCI.
- The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.
- The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE
- Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.
- Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.
- The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.
- None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.
- It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.
- Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.
- The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.
- Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.
- Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.
- MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.
- MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment advises on and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.
- Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD, FEA, InvestorForce, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.