

MSCI DIVIDEND POINTS INDEXES METHODOLOGY

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1 INTRODUCTION

The MSCI Dividend Points Indexes methodology aims to account for the aggregate index dividend points in the underlying MSCI Index constituents for a given time period. The total performance of an index is driven by the price performance and the dividend cash flows of the underlying constituents. The MSCI Dividend Points Index segregates the dividend cash flow of the underlying MSCI Index from its total performance. Index dividend points express dividends paid in an index for a given day, represented as a fraction of the index level itself.



2 CALCULATING THE MSCI DIVIDEND POINTS INDEXES

MSCI Dividend Points Indexes are designed to measure the income from regular cash distributions (cash dividend payments or capital repayments). The distributions are aggregated in the index and thus make up the total index performance of the MSCI Dividend Points Index.

The MSCI Dividend Points Index methodology cumulates regular cash distributions in the underlying parent index ("Parent Index") on the ex-date of such distributions. This is aligned with the treatment of regular cash distributions within MSCI's Daily Total Return (DTR) methodology, noted in the MSCI Index Calculation methodology¹.

The MSCI Dividend Points Indexes are calculated for any given underlying MSCI Index as per the following steps

- Calculation of Daily Index Dividend Points
- Calculation of MSCI Dividend Points Index level

2.1 CALCULATION OF DAILY INDEX DIVIDEND POINTS

The details of the calculation for the Index Dividend Points for a given day are noted in this section. The terms used in the Index Dividend Points formulae are reproduced here from the MSCI Index Calculation methodology for ease of reference.

Index Divisor (t)

The index divisor for a day t is defined as the ratio of the initial market capitalization and the previous index level of the Parent Index.

 $IndexDivisor_{t} = \frac{IndexInitialMarketCap_{t}}{IndexLevel_{t-1}}$

- IndexInitialMarketCap_t is the Initial Market Capitalization of the index at time t
- $IndexLevel_{t-1}$ is the Index level at time t-1

¹ Available at <u>https://www.msci.com/index-methodology</u>



The Index Divisor does not change unless the index composition changes, e.g., in cases of corporate events and index additions / deletions where a change in index market capitalization is not due to performance and does not correspond to a change in the index level.

The index divisor for day t is known after the close of day t-1 (the initial index market capitalization is calculated using prices and exchange rates as of day t-1 but constituents as of t).

Index Unit

The index unit describes the set of Parent Index constituents and corresponding quantities of total value equal to the index level. It can be derived by dividing the total index quantities by the index divisor.

Index Dividend Points

As noted in the MSCI Index Calculation methodology, Index Dividend Points express dividends paid in an index unit for a given day. They represent dividends as a fraction of the index level itself.

Gross² index dividend points can be calculated for a price index variant: they express the amount of dividends paid by a price index unit.

For every underlying Index constituent with an ex-dividend date on a given day, the Dividend Points can be calculated as

 $Security Dividend Points_t = \frac{DTRIndexNumberOfShares*DividendPerShare_t/FXrate_t}{PriceIndexDivisor_t}$

- *DividendPerShare*_t is the gross³ dividend per share expressed in the same currency unit as the price per share of the security s with ex dividend date at time t.
- *FXrate_t* is the FX rate of the price currency of security s vs USD at time t. It is the value of 1 USD in foreign currency.

³ or net

² Net index dividend points can be calculated for a price index variant: they express the amount of dividends net of withholding tax paid by a price unit.



- *PriceIndexDivisor*_t is the Index Divisor for the price index level variant of the Parent Index
- *DTRIndexNumberOfShares* is the index number of shares, which is the number of shares of a security taken into account for the index calculation for day t. Note that it is adjusted by the various index inclusion factors, such as the Foreign Inclusion Factor (FIF)⁴, for day t.

Security Dividend Points for underlying Index constituent with an ex-dividend date on a given day can be aggregated at index level to calculate the daily Index Dividend Points

$$IndexDividendPoints_t = \sum SecurityDivdendPoints_t$$

2.2 CALCULATION OF MSCI DIVIDEND POINTS INDEX LEVEL

MSCI Dividend Points Index level cumulates the dividend points within the Parent Index for a given period. The daily MSCI Dividend Point Index level is calculated as

 $IndexLevel_t = IndexLevel_{t-1} + IndexDividendPoints_t$

- IndexLevel_t is the Dividend Points Index level at time t
- $IndexLevel_{t-1}$ is the Dividend Points Index level at time t-1, previous day

⁴ Index inclusion factors encompass any inclusion factors specific to a given index, for example, the Value Inclusion Factor (VIF) for a Value index.



3 MAINTAINENCE OF THE MSCI DIVIDEND POINTS INDEXES

3.1 RESET FOR THE MSCI DIVIDEND POINTS INDEXES

As specified, the MSCI Dividend Points Indexes denote dividends for a set period. The MSCI Dividend Points Indexes are reset on a periodic basis. At the market open of the reset day, the MSCI Dividend Points Index level is

 $IndexLevel_0 = 0$ at reset

The annual reset of the MSCI Dividend Points Indexes is scheduled for the market open on the Monday following the third Friday of December.

3.2 ONGOING MAINTENANCE

The MSCI Dividend Points Indexes are derived from the existing Parent Indexes. As a result, corporate events are reflected in the MSCI Dividend Points Indexes as they occur and as they are captured in the Parent Indexes. The details regarding specific treatment of corporate events relevant to the MSCI Indexes can be found in the underlying index methodology books.

More specifically, the dividend implementation for the Dividend Points Indexes is aligned with the MSCI Daily Total Return (DTR) Indexes, as noted in the "Reinvestment Methodology" section in the MSCI Index Calculation methodology.

Further details regarding the treatment of corporate events and dividends relevant to the MSCI Indexes can be found in the MSCI Corporate Events Methodology and in the MSCI Index Calculation methodology book respectively.

The underlying Index methodology books, the MSCI Index Calculation methodology book and the MSCI Corporate Events methodology book are available at:

https://www.msci.com/index-methodology



APPENDIX I: VARIANTS OF MSCI DIVIDEND POINTS INDEXES

Generally, the MSCI Dividend Points Indexes that aggregate the gross dividends paid in the Parent Index are scheduled to reset with an annual frequency.

It is also possible to calculate the MSCI Dividend Points Indexes with a quarterly reset. The quarterly reset for the indexes will be scheduled to coincide with the close of the Quarterly Index Futures expiry. The reset will be effective at the open of the Monday following the third Friday of March, June, September and December. Such variants of the MSCI Dividend Points Indexes will have "Quarterly" indicated in the name of the index.

Additionally, MSCI Dividend Points Index that aggregate net dividends subject to withholding taxes will be indicated with "Net" in the name of such an index.





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