

MSCI EXCESS RETURN INDEXES METHODOLOGY

February 2022



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1 Introduction

The MSCI Excess Return Indexes are designed to represent the performance of an investment strategy tracking a given MSCI index after deducting borrowing cost.

2 Constructing the Index

2.1 OVERVIEW

The MSCI Excess Return Indexes are designed to represent the performance of an investment strategy tracking a given MSCI index ("Parent Index") after deducting borrowing cost.

2.2 CALCULATION FORMULA

The MSCI Excess Return Index level is calculated in accordance with the following formula:

$$ER_t = ER_{t-1} * \left(\frac{UI_t}{UI_{t-1}} - CR_{t-1} * \frac{ACT(t-1,t)}{Day\ Count} \right)$$

where:

ER_t = Excess Return Index on business day t

UI_t = Index Value of the Parent Index¹ on business day t

CR_{t-1} = Short-term rate² published on the previous business day t-1

Day Count = Day count convention used by the short-term rate

$ACT(t-1,t)$ = number of actual calendar days between business day t-1 and t

¹ The Parent Index can be a Price, Net or Gross Total Return Index

² Refer to Appendix 1 for more information on short-term rates



3 Maintaining the Index

The MSCI Excess Return Indexes are derived from the existing underlying MSCI Parent Indexes. As a result, corporate events are reflected in the MSCI Excess Return Indexes as they occur and as they are captured in the underlying MSCI Parent Index.

4 Appendix 1

The MSCI Excess Return Indexes Methodology uses the below short-term rates for the borrowing cost calculation.

Currency	USD	GBP	EURO	CHF	JPY
Short-term Rate	Overnight SOFR	Overnight SONIA	3-month EURIBOR	Overnight SARON	3-month TIBOR

The MSCI Excess Return Indexes Methodology may use other rates as applicable for the borrowing cost calculation.

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