

Infusive Global Consumer Champions Index Methodology

July 2019

Contents	1	Introduction	3
	2	Index Construction Methodology	4
	2.1	Applicable Universe	4
	2.2	Eligible Universe.....	4
	2.2.1	Eligible GICS Sub-Industries.....	4
	2.2.2	Eligible Exchanges.....	5
	2.2.3	Size Screening.....	6
	2.2.4	Liquidity Screening	6
	2.3	Financial Metrics Screening.....	7
	2.3.1	Financial Metrics Screening: Base Case.....	7
	2.3.2	Financial Metrics Screening: Data Processing and Outsourced Services, Footwear.....	10
	2.3.3	Financial Metrics Screening: Movies and Entertainment, Technology Hardware, Storage and Peripherals.....	10
	2.4	Security Selection	12
	2.5	Constituent Weighting.....	12
	3	Maintenance of the Index	13
	3.1	Quarterly Index Reviews	13
	3.2	Ongoing Event Related Changes	13
		Appendix I: Calculation of 3-month Annualized Daily Traded Value (ADTV).....	15
		Appendix II: Calculation of Fundamental Data Points and Financial Metrics.....	16
		Appendix III: Notes on Historical Calculation of the Index	20

1 Introduction

The Infusive Global Consumer Champions Index (the “Index”) is constructed from MSCI ACWI Investable Market Index (IMI) as the parent index (the “Parent index”) and aims to represent the performance of a select set of companies from consumption-related GICS^{®1} sub-industries. The index methodology aims to include companies which are liquid, have high market capitalization and have maintained historically high level of sales growth and profitability relative to their GICS sub-industry peers.

¹ GICS, the global industry classification standard jointly developed by MSCI Inc and S&P Global.

2 Index Construction Methodology

2.1 APPLICABLE UNIVERSE

The applicable universe includes all the existing constituents of the Parent Index. This approach aims to provide an opportunity set of sufficient liquidity and investability.

2.2 ELIGIBLE UNIVERSE

The eligible universe includes all the securities from the Parent Index which satisfy all of the following four eligibility conditions.

2.2.1 ELIGIBLE GICS SUB-INDUSTRIES

Securities of the companies from the following GICS sub-industries are eligible to be constituents of the Index.

Exhibit 1

GICS Sub-industry	GICS Code	GICS Sector
Automobile Manufacturers	25102010	Consumer Discretionary
Motorcycle Manufacturers	25102020	Consumer Discretionary
Apparel, Accessories and Luxury	25203010	Consumer Discretionary
Footwear	25203020	Consumer Discretionary
Leisure Facilities	25301030	Consumer Discretionary
Restaurants	25301040	Consumer Discretionary
Internet and Direct Marketing Retail	25502020	Consumer Discretionary
Department Stores	25503010	Consumer Discretionary
General Merchandise Stores	25503020	Consumer Discretionary
Apparel Retail	25504010	Consumer Discretionary
Specialty Stores	25504040	Consumer Discretionary
Homefurnishing Retail	25504060	Consumer Discretionary
Drug Retail	30101010	Consumer Staples

GICS Sub-industry	GICS Code	GICS Sector
Food Retail	30101030	Consumer Staples
Brewers	30201010	Consumer Staples
Distillers and Vintners	30201020	Consumer Staples
Soft Drinks	30201030	Consumer Staples
Packaged Foods and Meats	30202030	Consumer Staples
Tobacco	30203010	Consumer Staples
Household Products	30301010	Consumer Staples
Personal Products	30302010	Consumer Staples
Data Processing and Outsourced Services	45102020	Information Technology
Technology Hardware, Storage and Peripherals	45202030	Information Technology
Movies and Entertainment	50202010	Communication Services
Interactive Home Entertainment	50202020	Communication Services
Interactive Media and Services	50203010	Communication Services

2.2.2 ELIGIBLE EXCHANGES

Securities listed on the exchanges below are eligible to be constituents of the Index.

Exhibit 2

Eligible Exchanges			
ASX	London	OMX Nordic Copenhagen	Taiwan
Euronext Amsterdam	Madrid	OMX Nordic Stockholm	Thailand
Euronext Brussels	Malaysia	Oslo	Tokyo
Euronext Paris	Mexico	Sao Paulo	Toronto
Hong Kong	Milan	Shanghai	Xetra
JSE	NASDAQ	Shenzhen	
Korea	NYSE	SIX Swiss	

2.2.3 SIZE SCREENING

The securities with a full issuer market-capitalization greater than or equal to USD 1,000,000,000 are eligible to be constituents of the Index.

2.2.4 LIQUIDITY SCREENING

The securities with a 3-month Annualized Daily Traded Value (ADTV) greater than or equal to USD 50,000,000 are eligible to be constituents of the Index.

If there are multiple securities of the same issuer eligible for the index at initial construction (or at periodic rebalance), the security with higher 3-month ADTV is selected. If two securities have the same ADTV, then the security with the highest free float adjusted market capitalization will be chosen.

For the calculation of ADTV, please refer to Appendix I.

2.3 FINANCIAL METRICS SCREENING

The following financial metrics screens are applied to companies from the eligible universe defined in 2.2:

2.3.1 FINANCIAL METRICS SCREENING: BASE CASE

- The screens described in this section are not applicable for eligible constituents from the following GICS sub-industries: Data Processing and Outsourced Services, Footwear, Movies and Entertainment, and Technology Hardware, Storage and Peripherals.
- Companies from the eligible universe (2.2) that meet the criteria listed under either **Rule 1** or **Rule 2** described below are selected for the Index.
- To meet the selection criteria under **Rule 1**, a company must pass all the following screens which are applicable to that GICS sub-industry (Exhibit 3):
 - **Sales Growth Screen:** Companies must have a sales growth above the threshold stated in Exhibit 3. The calculation of the threshold is based on the sales-weighted average of the sales growth (SWA-SG) of companies from the eligible universe belonging to the same GICS sub-industry. For details on the exact calculation of Sales Growth and the SWA-SG, please see Appendix II.
 - **EBITDA Margin Screen:** Companies must have an EBITDA margin above the threshold stated in Exhibit 3. The calculation of the threshold is based on the sales-weighted average of the EBITDA margin (SWA-EM) of companies from the eligible universe belonging to the same GICS sub-industry. For details on the exact calculation of the EBITDA margin and the SWA-EM, please see Appendix II.
 - **ROIC Screen:** Companies must have a ROIC above the threshold in Exhibit 3. The calculation of the threshold is based on the sales-weighted average of the ROIC (SWA-ROIC) of companies from the eligible universe belonging to the same GICS sub-industry. For details on the exact calculation of ROIC and SWA-ROIC, please see Appendix II.
- **Rule 2:** To be selected through this rule, a company must pass the following screen:
 - **High Sales Growth Screen:** Companies with sales growth above the high sales growth threshold pass this screen. This hurdle rate is calculated based on SWA-SG as per the **Rule 1** sales growth screen but with a higher threshold as stated in Exhibit 13. It is only available to establish eligibility for certain

GICS sub-industries as stated in Exhibit 3. The companies which pass this screen are included irrespective of screens under **Rule 1**.

The thresholds for the relevant sub-industries are described in Exhibit 3. For example, companies in Automobile Manufacturers need to pass the EBITDA Margin Screen, while companies in Apparel Retail need to pass Sales Growth Screen and ROIC Screen. Additionally, companies in Apparel Retail which pass High Sales Growth Screen under Rule 2 are also included in the Index (regardless of their performance on the Rule 1 screens).

Exhibit 3

GICS Sub-Industry	Rule 1			Rule 2
	Sales Growth Threshold	EBITDA Margin Threshold	ROIC Threshold	High Sales Growth Threshold
Apparel Retail	SWA-SG - 250bps	Not Applicable (N/A)	75% * SWA-ROIC	SWA-SG + 1000bps
Apparel, Accessories and Luxury	SWA-SG - 250bps	N/A	75% * SWA-ROIC	SWA-SG + 1000bps
Automobile Manufacturers	N/A	175% * SWA-EM	N/A	N/A
Brewers	N/A	75% * SWA-EM	N/A	SWA-SG + 1000bps
Department Stores	SWA-SG + 250bps	125% * SWA-EM	N/A	N/A
Distillers and Vintners	N/A	75% * SWA-EM	N/A	SWA-SG + 1000bps
Drug Retail	SWA-SG + 250bps	N/A	125% * SWA-ROIC	N/A
Food Retail	SWA-SG + 250bps	N/A	125% * SWA-ROIC	N/A
General Merchandise Stores	SWA-SG + 250bps	N/A	125% * SWA-ROIC	N/A
Interactive Home Entertainment	Minimum of (10%, SWA-SG - 250bps)	75% * SWA-EM	N/A	N/A

GICS Sub-Industry	Rule 1			Rule 2
	Sales Growth Threshold	EBITDA Margin Threshold	ROIC Threshold	High Sales Growth Threshold
Interactive Media and Services	Minimum of (10%, SWA-SG - 250bps)	75% * SWA-EM	N/A	N/A
Homefurnishing Retail	SWA-SG + 250bps	N/A	125% * SWA-ROIC	N/A
Household Products	N/A	N/A	125% * SWA-ROIC	N/A
Internet and Direct Marketing Retail	Minimum of (10%, SWA-SG - 250bps)	N/A	75% * SWA-ROIC	N/A
Leisure Facilities	SWA-SG - 250bps	N/A	75% * SWA-ROIC	SWA-SG + 1000bps
Motorcycle Manufacturers	SWA-SG of Automobile Manufacturers - 250bps	150% * SWA-EM of Automobile Manufacturers	N/A	N/A
Packaged Foods and Meats	N/A	87.5% * SWA-EM	N/A	SWA-SG + 1000bps
Personal Products	N/A	75% * SWA-EM	N/A	SWA-SG + 1000bps
Restaurants	N/A	75% * SWA-EM	N/A	SWA-SG + 1000bps
Soft Drinks	N/A	75% * SWA-EM	N/A	SWA-SG + 1000bps
Specialty Stores	SWA-SG	SWA-EM	N/A	N/A
Tobacco	N/A	75% * SWA-EM	N/A	SWA-SG + 1000bps

2.3.2 FINANCIAL METRICS SCREENING: DATA PROCESSING AND OUTSOURCED SERVICES, FOOTWEAR

For the GICS sub-industries Data Processing and Outsourced Services, and Footwear, companies need to also pass the Market Capitalization Screen in addition to screens under **Rule 1** previously defined (2.3.1). The thresholds are described in Exhibit 4.

- **Additional Market Capitalization Screen:** Companies must have a minimum full issuer market-capitalization of 10% of the total full issuer market-capitalization of companies from the eligible universe belonging to the same GICS sub-industry to pass this screen.

Exhibit 4

GICS Sub-Industry	Sales Growth Threshold	EBITDA Margin Threshold	ROIC Threshold	Market Cap Threshold
Data Processing and Outsourced Services	N/A	SWA-EM + 1000bps	N/A	10% * Full issuer market-capitalization of sub-industry
Footwear	SWA-SG - 250bps	N/A	75% * SWA-ROIC	10% * Full issuer market-capitalization of sub-industry

2.3.3 FINANCIAL METRICS SCREENING: MOVIES AND ENTERTAINMENT, TECHNOLOGY HARDWARE, STORAGE AND PERIPHERALS

For Movies and Entertainment and Technology Hardware, Storage and Peripherals sub-industries, companies need to pass the screens under **Rule 1** previously defined (2.3.1). The thresholds are described in Exhibit 5.

Calculation of SWA-ROIC for these sub-industries is defined as below: -

- **SWA-ROIC:** For calculation of SWA-ROIC, please refer to Appendix II. The ROIC values used in the calculation of SWA-ROIC are capped at 50% for the companies with ROIC above 50%.

Exhibit 5

GICS Sub-Industry	EBITDA Margin Threshold	ROIC Threshold	High Sales Growth Threshold
Movies and Entertainment	N/A	75% * SWA-ROIC	SWA-SG + 1000bps
Technology Hardware, Storage and Peripherals	SWA-EM	SWA-ROIC	N/A

2.4 SECURITY SELECTION

The securities from the eligible universe (previously defined in 2.2) that pass the Financial Metrics Screens (previously defined in 2.3) are included in the index.

2.5 CONSTITUENT WEIGHTING

The constituent securities of the index are weighted in proportion of their free float market capitalization before capping.

The MSCI 25/50 Indexes methodology with modified constraints as defined below is applied in the last index construction step to obtain the final Index. The following parameters are used in the application of the 20/25 capping methodology (in place of 25/50 capping):

- The weight of any single issuer will be constrained at 20%.
- The sum of the weights of all issuers representing more than 5% weight will be constrained at 25%.
- A buffer of 10% of the value of each constraint is used. As a result, at the point of constructing or rebalancing the 20/25 Capped Index, the weight of any single issuer cannot exceed 18% of the index weight and all issuers with weight above 4.5% cannot exceed 22.5% of the index weight.

In general, the 20/25 capped index follows the event maintenance of the MSCI 25/50 Indexes Methodology. Please refer to the MSCI 25/50 Indexes methodology at www.msci.com/index-methodology for more details.

3 Maintenance of the Index

3.1 QUARTERLY INDEX REVIEWS

This Index and an uncapped version are rebalanced on a quarterly basis to coincide with the regular Index Reviews (Semi-Annual Index Reviews in May and November and Quarterly Index Reviews in February and August) of the MSCI Global Investable Market Indexes. The changes are implemented at the end of February, May, August and November. The pro forma indexes are in general announced nine business days before the effective date.

Fundamental data for the financial metrics for the Quarterly Index Reviews will be taken as of the end of the month preceding the Index Review, i.e., January, April, July and October.

3.2 ONGOING EVENT RELATED CHANGES

The general treatment of corporate events in the Infusive Global Consumer Champions Index 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 Infusive Global Consumer Champions Index, the changes made to the Parent Index during intermediate Index Reviews will be neutralized in the Infusive Global Consumer Champions Index.

The following section briefly describes the treatment of common corporate events within the Infusive Global Consumer Champions Index.

No new securities will be added (except where noted below) to the Index between Index Reviews. Parent Index deletions will be reflected simultaneously in this derived Index.

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>

Appendix I: Calculation of 3-month Annualized Daily Traded Value (ADTV)

$$ADTV = ATV / 252$$

Where:

- ADTV = 3-month Annualized Daily Traded Value
- ATV = 3-month Annualized Traded Value

For details on the calculation of ATV, please refer to [MSCI Index Calculation Methodology](#).

Appendix II: Calculation of Fundamental Data Points and Financial Metrics

Total Sales in USD

I. Total Sales in USD if all the required sales data is available

$$Total\ Sales\ in\ USD = USD\ Sales_t + USD\ Sales_{t-1} + USD\ Sales_{t-2}$$

Where:

- $USD\ Sales_t = Sales\ in\ Local\ Currency_t / FX\ rate\ on\ t$
- $USD\ Sales_{t-1} = Sales\ in\ Local\ Currency_{t-1} / FX\ rate\ on\ t-1$
- $USD\ Sales_{t-2} = Sales\ in\ Local\ Currency_{t-2} / FX\ rate\ on\ t-2$
- $Sales\ in\ Local\ Currency_t =$ Last Twelve Months (LTM) sales as of today
- $Sales\ in\ Local\ Currency_{t-1} =$ LTM sales as of one year ago
- $Sales\ in\ Local\ Currency_{t-2} =$ LTM sales as of two years ago
- FX rate = Spot rate as of the period end date.

II. Total Sales in USD if LTM sales as of two years ago is unavailable.

$$Total\ Sales\ in\ USD = USD\ Sales_t + USD\ Sales_{t-1}$$

III. Total Sales in USD if LTM sales as of one year ago are unavailable.

$$Total\ Sales\ in\ USD = USD\ Sales_t$$

Sales Weight

$$\text{Sales Weight of company}_i = \frac{\text{Total USD Sales}_i}{\sum_{i=1}^n \text{Total USD Sales}}$$

Where:

- n=number of companies from the eligible universe in that sub-industry.

Sales weights are used to calculate sales-weighted average (SWA) metrics.

Sales Growth

• Sales Growth Calculation

- I. If Last Twelve Months (LTM) Sales as of 3 year ago and LTM sales as of today are available, then

$$\text{Sales Growth} = \left(\frac{\text{Sales in Local Currency}_t}{\text{Sales in Local Currency}_{t-3}} \right)^{\frac{1}{3}} - 1$$

Where:

- *Sales in Local Currency*_{t-3} = LTM sales as of three years ago.

- II. If LTM Sales as of 3 years ago is unavailable and LTM Sales as of 2 years ago and as of today are available, then

$$\text{Sales Growth} = \left(\frac{\text{Sales in Local Currency}_t}{\text{Sales in Local Currency}_{t-2}} \right)^{\frac{1}{2}} - 1$$

- III. If LTM Sales as of 3 years ago and 2 years ago are unavailable and LTM Sales as of 1 years ago and as of today are available, then

$$\text{Sales Growth} = \frac{\text{Sales in Local Currency}_t}{\text{Sales in Local Currency}_{t-1}} - 1$$

• Sales Weighted Average of the Sales Growth (SWA-SG) Calculation

$$\text{SWA} - \text{SG} = \sum_{i=1}^n \text{Sales Weight of company}_i * \text{Sales Growth of company}_i$$

Where:

- n=number of companies from the eligible universe in that sub-industry.

EBITDA Margin

- EBITDA Margin Calculation

I. When all the required data is available, then

EBITDA Margin

$$= \frac{EBITDA_t + EBITDA_{t-1} + EBITDA_{t-2}}{Sales\ in\ Local\ Currency_t + Sales\ in\ Local\ Currency_{t-1} + Sales\ in\ Local\ Currency_{t-2}}$$

Where:

- EBITDA = Operating income before unusual expense plus depreciation and amortization
- $EBITDA_t$ = Last Twelve Months (LTM) EBITDA as of today
- $EBITDA_{t-1}$ = LTM EBITDA as of one year ago
- $EBITDA_{t-2}$ = LTM EBITDA as of two years ago.

II. If either LTM EBITDA or LTM Local Sales as of two years ago is unavailable, then

$$EBITDA\ Margin = \frac{EBITDA_t + EBITDA_{t-1}}{Local\ Sales_t + Local\ Sales_{t-1}}$$

III. If either LTM EBITDA or LTM Local Sales as of one years ago is unavailable, then

$$EBITDA\ Margin = \frac{EBITDA_t}{Local\ Sales_t}$$

- Sales Weighted Average EBITDA Margin (SWA-EM) Calculation

$$SWA - EM = \sum_{i=1}^n Sales\ Weight\ of\ company_i * EBITDA\ margin\ of\ company_i$$

Where:

- n=number of companies from the eligible universe in that sub-industry.

ROIC

- ROIC Calculation

I. When all the required data is available, then

$$ROIC = \frac{Operating\ Income_t + Operating\ Income_{t-1} + Operating\ Income_{t-2}}{Average\ IC_t + Average\ IC_{t-1} + Average\ IC_{t-2}}$$

Where:

- Operating Income = operating income before unusual expense
- $Operating\ Income_t$ = Last Twelve Months (LTM) Operating Income as of today
- $Operating\ Income_{t-1}$ = LTM Operating Income as of one year ago
- $Operating\ Income_{t-2}$ = LTM Operating Income as of two years ago
- Invested Capital = Shareholder's equity + Total Debt + Minority Interest
- Average IC = Average Invested Capital
- $Average\ IC_t = \frac{Invested\ Capital_t + Invested\ Capital_{t-1}}{2}$
- $Average\ IC_{t-1} = \frac{Invested\ Capital_{t-1} + Invested\ Capital_{t-2}}{2}$
- $Average\ IC_{t-2} = \frac{Invested\ Capital_{t-2} + Invested\ Capital_{t-3}}{2}$

Average Invested Capital is calculated even if one of the two values is unavailable.

II. If either LTM Operating Income as of two years ago or Average IC_{t-2} is unavailable, then

$$ROIC = \frac{Operating\ Income_t + Operating\ Income_{t-1}}{Average\ Invested\ Capital_t + Average\ Invested\ Capital_{t-1}}$$

III. If either LTM Operating Income as of one year ago or Average IC_{t-1} is unavailable, then

$$ROIC = \frac{Operating\ Income_t}{Average\ Invested\ Capital_t}$$

- Sales Weighted Average ROIC (SWA-ROIC) Calculation

$$SWA - ROIC = \sum_{i=1}^n Sales\ weight\ of\ company_i * ROIC\ of\ company_i$$

Where:

- n=number of companies from the eligible universe in that sub-industry.

Appendix III: Notes on Historical Calculation of the Index

GICS Changes

From Dec 2018 rebalance, Interactive Home Entertainment has replaced Home Entertainment Software sub-industry and Interactive Media and Services has replaced Internet Software and Services sub-industry. Financial metrics screens for Interactive Media and Services have remained the same as those for the former Internet Software and Services sub-industry.

The thresholds used for financial metric screening for Home Entertainment Software are described in the Exhibit 6.

Exhibit 6

GICS Sub-Industry	Sales Growth	EBITDA Margin
Home Entertainment Software	SWA-SG	SWA-EM

Liquidity Adjustment for US and Canada Securities

Prior to Dec 2015 rebalance, US and Canada securities are sorted in descending order of 3-month ADTV and securities in top 25th percentile are eligible for inclusion in the index. Securities from other countries should have a 3-month ADTV greater than or equal to USD 50,000,000.

Historical Rebalancing Frequency

Historically, the index was rebalanced semi-annually until the June 2018 rebalance.

Contact us

clientservice@msci.com

AMERICAS

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
São 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 *
Thailand	0018 0015 6207 7181 *
Tokyo	+ 81 3 5290 1555

* = toll free

ABOUT MSCI

MSCI is a leader provider of critical decision support tools and services for the global investment community. With over 45 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit 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 disseminated 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 INFORMATION.

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 be 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 investable 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 decision 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 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.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

Privacy notice: For information about how MSCI ESG Research LLC collects and uses personal data concerning officers and directors, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.