

S&P Frontier Indices *Methodology*

April 2024

Table of Contents

Introduction	3
Index Objective	3
Highlights	3
Index Family	3
How to Use this Document	4
Supporting Documents	5
Eligibility Criteria and Index Construction	6
Country Inclusion Criteria	6
Country Classification	6
Stock Level Inclusion Criteria	6
Index Calculations	9
S&P Frontier BMI	10
S&P Africa 40	11
S&P Access Africa	12
S&P Extended Frontier 150	13
S&P Select Frontier	14
S&P Vietnam Core	15
Index Maintenance	16
Rebalancing	16
Spin-Offs, Additions, and Deletions	17
Corporate Actions	18
Investable Weight Factor (IWF)	18
Other Adjustments	18
Historical Region Composition	18
Currency of Calculation and Additional Index Return Series	19
Index Data	20
Calculation Return Types	20
Index Governance	21
Index Committee	21
Index Policy	22
Announcements	22
Pro-forma Files	22

	Holiday Schedule	22
	Rebalancing	22
	Unexpected Exchange Closures	22
	Recalculation Policy	22
	Contact Information	22
Index Dissemination		23
	Tickers	23
	Index Data	23
	Web site	23
Appendix I		24
	S&P Frontier BMI History	24
Appendix II		25
	Methodology Changes	25
Appendix III		27
	ESG Disclosures	27
Disclaimer		28
	Performance Disclosure/Back-Tested Data	28
	Intellectual Property Notices/Disclaimer	29
	ESG Indices Disclaimer	31

Introduction

Index Objective

The S&P Frontier Indices measure the performance of selected smaller and less liquid equity markets. Index constituents are float-adjusted market capitalization (FMC), or capped market capitalization weighted, as defined for each index in *Eligibility Criteria and Index Construction*.

For S&P Dow Jones Indices' definitions of emerging and frontier markets please refer to the S&P Global BMI & S&P/IFCI Indices Methodology available at www.spglobal.com/spdji/.

Highlights

The S&P Frontier BMI is a comprehensive benchmark index that includes companies from frontier markets around the world. This broad benchmark serves as the universe for the S&P Africa Frontier, S&P Pan Africa, and S&P Pan Eastern Europe indices. The S&P Pan Africa serves as the universe for the S&P Pan Africa ex South Africa. The indices use the same index rules and selection criteria of their parent index.

The S&P Access Africa, S&P Africa 40, S&P Extended Frontier 150, S&P Select Frontier, and S&P Vietnam Core Indices are composed of relatively liquid stocks. Within each index, constituents must meet minimum size and liquidity requirements. These indices follow a capped market capitalization weighted scheme to ensure diversification. Weighting criteria are applied to each index at each rebalancing.

Index Family

Members of the S&P Frontier family of indices include:

- **S&P Frontier BMI.** The index measures the performance of relatively small and illiquid markets. Each country sub-index contains publicly listed equities with the objective of meeting 80% total market capitalization, subject to size and liquidity criteria. S&P Dow Jones Indices calculates frontier market indices for Argentina, Ecuador, Jamaica, Panama and Trinidad & Tobago in Latin America and the Caribbean; Bulgaria, Croatia, Cyprus, Estonia, Iceland, Latvia, Lithuania, Romania, Slovakia, and Slovenia in Europe; Bahrain, Botswana, Côte d'Ivoire, Ghana, Jordan, Kazakhstan, Kenya, Mauritius, Morocco, Namibia, Oman, Tunisia, Zambia in the Middle East and Africa; and Bangladesh, Pakistan, Sri Lanka, and Vietnam in Asia.
- **S&P Frontier BMI ex GCC.** The index is composed of the same constituents as the S&P Frontier BMI but excludes all GCC markets -- Bahrain and Oman.¹
- **S&P Access Africa.** The index measures the performance of the largest and most liquid Johannesburg-listed securities in the S&P South Africa BMI and those companies classified as "offshore companies". Offshore companies are companies domiciled outside Africa with no active listing on an African exchange but that have 50% or more of assets or revenues derived from Africa. The index includes a selection constraint limiting the number of companies from any single country to 20 stocks, based on country of listing.
- **S&P Africa 40.** The index measures the performance of 40 of the largest and most liquid companies that operate purely in, or derive over 50% of their revenues from, Africa. It limits the number of companies from any single country to eight and includes developed market listings of

¹ Following the consolidation and restructuring of the S&P/Citigroup Emerging and S&P/EMDB indices on November 3, 2008, the former S&P/IFCG Frontier was renamed the S&P Frontier BMI ex GCC. All historical values, back to December 1995, are preserved in this index. For more on the history of the S&P Frontier BMI, please see *Appendix I*.

companies domiciled in Africa or that have more than 50% of their assets and operations in Africa.

- **S&P Africa Frontier.** The S&P Africa Frontier is a regional index created as a sub-index of the S&P Frontier BMI ex GCC. This index represents a benchmark for the Sub-Saharan African continent and includes stocks from the Botswana, Côte d'Ivoire, Ghana, Kenya, Mauritius, Namibia, and Zambia frontier African countries.
- **S&P Emerging Frontier Super Composite BMI.** The index is a combination of the S&P Frontier BMI and the S&P Emerging BMI plus Korea.
- **S&P Extended East Africa BMI.** The index is a broad benchmark for the East Africa region and is constructed as a composite of the BMI country indices for Kenya, Uganda, Rwanda, and Tanzania.
- **S&P Extended Frontier 150.** The index consists of the 150 largest and most liquid companies from over 30 countries.
- **S&P Pan Africa.** The index is a broad benchmark index for the African continent and includes both emerging and frontier market stocks from Botswana, Côte d'Ivoire, Egypt, Ghana, Kenya, Mauritius, Morocco, Namibia, South Africa, Tunisia, and Zambia.
- **S&P Pan Eastern Europe.** The index is a broad benchmark for the Eastern Europe region and includes both emerging and frontier market stocks from Cyprus, the Czech Republic, Estonia, Hungary, Poland, Romania, and Slovenia.
- **S&P Select Frontier.** The index consists of 40 of the largest and most liquid companies from the S&P Extended Frontier 150. Constituents include listings in Hong Kong, London, and New York, as well as local listings from markets generally accessible to foreign investors.
- **Stand-Alone Country Indices.** Country indices for Lebanon, Malawi, Nigeria, Palestine, Rwanda, Tanzania, Uganda, and Ukraine are ineligible for the S&P Frontier BMI but do follow all the same eligibility criteria as defined in the sections below.
- **S&P Vietnam Core.** The index measures the performance of the largest and most liquid securities from the S&P Vietnam BMI (the "underlying index"), targeting 90% of the underlying index's FMC.

How to Use this Document

This document details all relevant information for the S&P-branded family of Frontier indices. All stock level criteria applicable to the S&P Frontier BMI are also applicable to the S&P Frontier BMI ex GCC and the S&P Africa Frontier. The same applies to the frontier markets constituents in the S&P Pan Africa and S&P Pan Africa ex South Africa Indices, the S&P Pan Eastern Europe Index, and the S&P Emerging Frontier Super Composite BMI. The emerging market constituents of the latter indices use the S&P Global BMI stock level criteria.

For more information on developed, emerging, or frontier market criteria please refer to the S&P Global BMI & S&P/IFCI Indices Methodology.

Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	Equity Indices Policies & Practices
S&P Dow Jones Indices' Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices' Float Adjustment Methodology	Float Adjustment Methodology
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	GICS Methodology
S&P Dow Jones Indices' Country Classification Methodology	Country Classification Methodology

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

Eligibility Criteria and Index Construction

Country Inclusion Criteria

Potential frontier markets are analyzed for investor interest and accessibility. In deciding whether to initiate coverage of a frontier market, S&P Dow Jones Indices considers whether a market has adequate turnover, number of listings and whether it has attracted some foreign investor interest. Other considerations are a market's development prospects and, in particular, whether it is likely to develop the breadth (i.e., listings), depth (i.e., market capitalization and turnover), and infrastructure (i.e., regulatory structure, custody, clearance, and settlement) for S&P Dow Jones Indices to maintain regular frontier index calculations.

If a country qualifies for inclusion, an official announcement of the pending addition of the country to the S&P Frontier BMI is made at least three months before inclusion. Once a market is a member of the S&P Frontier BMI it becomes eligible for the S&P Africa Frontier, S&P Pan Africa, S&P Pan Africa ex South Africa, and S&P Pan Eastern Europe indices as long as it meets all other required criteria. While the rules generally also apply to the S&P Africa 40, S&P Extended Frontier 150, and S&P Select Frontier indices, any new country must meet the domicile and exchange listing requirements for each index. The corresponding Index Committee first approves the addition of any new market to each index.

Country Classification

Country classification depends on a range of factors covering macroeconomic conditions, political stability, legal property rights and procedures, and trading and settlement processes and conditions. Further, the opinions and experiences of institutional investors matter. If most institutional investors see major risks in a market and treat it as a frontier or emerging market, no amount of analysis by index providers turns it into a developed market. The institutional consensus is critically important.

For more information on S&P Dow Jones Indices' country classification policy, please refer to S&P Dow Jones Indices' Country Classification Methodology.

Stock Level Inclusion Criteria

The following inclusion criteria, which apply to the S&P Frontier BMI, also apply to the S&P Africa Frontier, S&P Pan Africa, S&P Pan Africa ex South Africa, and S&P Pan Eastern Europe indices. Companies domiciled in frontier markets are eligible for inclusion if they meet the following requirements:

Public Shares Available to Foreign Investors. If an individual stock's foreign investment limit is very stringent and the stock is in high demand amongst global investors, then frequently the amount available to foreign investors is quickly used up.

For Oman and Vietnam, S&P Dow Jones Indices reviews not only the theoretical foreign investment limits applicable to companies (as calculated through S&P Dow Jones Indices' Investable Weight Factor (IWF)), but also the practical available limit (as defined by the known shares actually available to foreign investors).

If the practical available limit for an existing constituent falls below 5%, then it will be removed from the index at the subsequent rebalancing. A stock can be added only if the practical available limit is 10% or more. All stocks are reviewed for the above at each rebalancing.

Investability. Markets with broad foreign investment restrictions are excluded.

Please refer to the following country tables to see which countries are eligible within each index.

Country Name	S&P Frontier BMI	S&P Frontier BMI ex GCC	S&P Frontier BMI Standalone	S&P Africa Frontier	S&P Pan Africa	S&P Pan Eastern Europe
ARGENTINA ²	▲	●				
BAHRAIN	●					
BANGLADESH	●	●				
BOTSWANA	●	●		●	●	
BULGARIA	●	●				
CAMBODIA						
CONGO						
CÔTE D'IVOIRE	●	●		●	●	
CROATIA	●	●				
CYPRUS	●	●				●
CZECH REPUBLIC						●
ECUADOR	●	●				
EGYPT					●	
ESTONIA	●	●				●
GABON						
GEORGIA						
GHANA	●	●		●	●	
GUINEA						
HUNGARY						●
ICELAND	●	●				
JAMAICA	●	●				
JORDAN	●	●				
KAZAKHSTAN	●	●				
KENYA	●	●		●	●	
LATVIA	●	●				
LEBANON			●			
LITHUANIA	●	●				
MALAWI			●			
MALI						
MAURITIUS	●	●		●	●	
MOROCCO	●	●			●	
NAMIBIA			●			
NIGERIA			●			
OMAN	●					
PAKISTAN	●	●				
PALESTINE			●			
PANAMA	●	●				
POLAND						●
ROMANIA	●	●				●
RWANDA			●			
SIERRA LEONE						
SLOVAKIA	●	●				
SLOVENIA	●	●				●
SOUTH AFRICA					●	
SRI LANKA	●	●				
TANZANIA			●			
TRINIDAD AND TOBAGO	●	●				
UGANDA			●			
TUNISIA	●	●			●	
UKRAINE			●			
VIETNAM	●	●				
ZAMBIA	●	●		●	●	
TOTALS	32	30	8	7	11	7

² Beginning with the 2020 annual reconstitution local listings in Argentina are ineligible; companies domiciled in Argentina listed in developed market exchanges remain eligible.

Country Name	Extended Frontier 150	S&P Select Frontier
ARGENTINA	▲	▲
BAHRAIN	‡	‡
BANGLADESH	•	▲
BOTSWANA	•	▲
BULGARIA	▲	▲
CAMBODIA	▲	▲
CONGO		
CÔTE D'IVOIRE	•	▲
CROATIA	•	•
CYPRUS	•	•
ECUADOR	▲	
EGYPT		
ESTONIA	•	▲
GABON		
GEORGIA	▲	▲
GHANA	•	▲
GUINEA		
ICELAND	•	•
JAMAICA	▲	
JORDAN	•	•
KAZAKHSTAN	▲	▲
KENYA	•	▲
LATVIA	•	▲
LITHUANIA	•	•
MALI		
MAURITIUS	•	▲
MOROCCO	•	•
NAMIBIA	▲	▲
NIGERIA		
OMAN	•	•
PAKISTAN	•	•
PANAMA	▲	▲
ROMANIA	•	•
SIERRA LEONE		
SLOVAKIA	•	▲
SLOVENIA	•	▲
SOUTH AFRICA		
SRI LANKA	•	▲
TRINIDAD AND TOBAGO	▲	
TUNISIA	•	▲
UKRAINE	‡	▲
VIETNAM	•	•
ZAMBIA	▲	▲
TOTALS	35	32

- Local market listing.
- ▲ Constituents from these countries must be trading in Developed markets.
- † Constituents may be incorporated outside Africa and listed in Developed markets but must have the majority of their assets and operations in Africa.
- ‡ Only Developed market listings or eligible non-local listings are allowed.

Eligible Securities. All investable primary market share classes are considered for inclusion to the S&P Frontier indices. Each share class is float-adjusted according to a unique IWF. The S&P Extended Frontier 150 and S&P Select Frontier indices only include those stocks with real-time stock pricing.

Ineligible Securities. The following shares are ineligible for inclusion in any of the S&P Frontier indices featured in this document:

- Business Development Companies (BDCs)
- Investment Trusts
- Closed-end funds
- Limited Partnerships

- Convertible bonds
- Equity warrants
- Fixed-dividend shares
- Mutual fund shares
- Preferred (preferred stock that provides a guaranteed fixed return is ineligible)
- Unit trusts

Multiple Share Classes. In some cases, companies issue multiple share classes. A separate investable weight factor (IWF) is calculated for each class and the class is included providing it meets eligibility criteria and foreign investors can hold shares in the class.

- **S&P Frontier BMI and S&P Vietnam Core.** All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria. For more information regarding the treatment of multiple share classes, please refer to Approach A within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.
- **S&P Access Africa, S&P Africa 40, S&P Extended Frontier 150, and S&P Select Frontier Indices.** Each company is represented once by the Designated Listing. For more information regarding the treatment of multiple share classes, please refer to Approach B within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Initial Public Offerings (IPOs). The criteria for inclusion of an IPO are the same as that used at the annual reconstitution of the S&P Global BMI. Market cap and liquidity eligibility criteria of IPOs are evaluated as of the respective index's rebalancing reference date. In addition, IPOs must have a trading history of at least three months as of the reference date. Since an IPO will have traded less than a full year, the trading value data that is available is annualized to determine index eligibility. IPOs are ineligible for fast-track entry to the S&P Frontier BMI.

Sector Classification. Stocks are classified by the Global Industry Classification Standard (GICS®) – a four-tiered industry classification structure.

For more information on GICS, please refer to S&P Dow Jones Indices' GICS Methodology.

Index Calculations

The index calculates by means of the divisor methodology used in S&P Dow Jones Indices' equity indices.

For more information on the index calculation methodology, please refer to the Market Capitalization Weighted Indices and Capped Market Capitalization Weighted Indices sections of S&P Dow Jones Indices' Index Mathematics Methodology.

S&P Frontier BMI

Index Universe. At each annual reconstitution, the index universe consists of all local exchange-listed stocks from Frontier markets. Frontier-market stocks trading in developed markets are also eligible, provided the developed market listing is the only listing.

Selection Universe. Eligible stocks are selected with the objective of meeting 80% total market capitalization, subject to the size and liquidity rules defined by the three market Tiers defined below. Final composition is greatly dependent on the specific frontier market; pending all selection criteria, market coverage can differ greatly from market to market.

S&P Dow Jones Indices created three different tiers based on the total market capitalization of each country to represent the trading reality of each market. Stock selection is based on the stock market capitalization and liquidity within each Tier:

- **Tier 1.** Total stock market universe of over US\$ 20 billion. Each index constituent must have a minimum FMC of US\$ 100 million, and an annual value traded (AVT) of US\$ 35 million. If the 80% target market coverage is not met, the liquidity requirement may be relaxed to include companies with at least 120 days traded over the prior 12 months. Stocks with an AVT of less than or equal to US\$ 1 million are excluded from the market coverage representation.
- **Tier 2.** Total stock market universe between US\$ 10 and 20 billion. Each index constituent must have a minimum FMC of US\$ 100 million, and an AVT figure of US\$ 10 million. If the 80% target market coverage is not met, the liquidity requirement may be relaxed to include companies with at least 91 days traded over the prior 12 months. Stocks with an AVT of less than or equal to US\$ 1 million are excluded from the market coverage representation.
- **Tier 3.** Total stock market universe of under US\$ 10 billion. Each index constituent must have a minimum FMC of US\$ 10 million, and either an AVT figure of US\$ 5 million, or 60 annual days traded over the prior 12 months. Stocks that traded fewer than 20 days over the prior year are excluded from the market coverage representation.

Constituent Selection. At each rebalancing, the eligible stocks form the index, subject to a 50% FMC and AVT buffer. Current constituents remain eligible provided they have:

- Tier 1: FMC of at least US\$ 50 million, AVT of at least US\$ 17.5 million.
- Tier 2: FMC of at least US\$ 50 million, AVT of at least US\$ 5 million.
- Tier 3: FMC of at least US\$ 5 million, AVT of at least US\$ 2.5 million.

Constituent Weightings. The index is FMC weighted.

S&P Africa 40

Index Universe. The index universe consists of all the constituents of the S&P Nigeria BMI, S&P Global BMI, and the S&P Frontier BMI country indices for Egypt, Ghana, Kenya, Morocco, Nigeria, South Africa, and Tunisia, as well as all developed market listings of companies domiciled in Africa or that have more than 50% of their assets and operations in Africa. All index constituents must be domiciled in Africa or have more than 50% of their assets and operations in Africa.

Selection Universe. Stocks in the index universe that satisfy the below eligibility criteria, as of the rebalancing reference date, form the selection universe:

- **Market Capitalization.** Stocks must have an FMC of at least US\$ 100 million.
- **Liquidity.** Stocks must have a three-month average daily value traded (ADVT) of at least US\$ 1 million.

Constituent Selection. Stocks in the selection universe are ranked in decreasing order by FMC with the largest 40 stocks selected for index inclusion, subject to a single country constituent count of eight. If any country's company count exceeds eight, the next largest eligible stock from a country that does not yet have eight constituents is chosen. This process proceeds iteratively until the target constituent count of 40 is met.

Constituent Weightings. At each rebalancing, the index is FMC weighted, subject to the following constraints:

- No stock's weight can exceed 8%.
- No country's weight can exceed 30%.

Any excess weight is proportionally redistributed to uncapped constituents.

S&P Access Africa

Index Universe. At each rebalancing, the index universe is all Johannesburg-listed constituents of the S&P South Africa BMI and offshore companies. Data used to determine offshore companies' assets and operations based in Africa is reviewed once a year after the close of the last business day in July.

Selection Universe. Stocks in the index universe that satisfy the below criteria, as of the rebalancing reference date, form the selection universe:

- **Market Capitalization:** must have an FMC of at least US\$ 200 million.
- **Liquidity:** must have a three-month ADVT of at least US\$ 1 million. For this index, only developed market listings and Johannesburg Stock Exchange listings are considered.

Constituent Selection. At each rebalancing, the eligible stocks form the index, subject to the following constraint:

- A single country maximum selection of 20 companies, so no country can have more than 20 constituents.

Constituent Weightings. At each rebalancing, constituents are FMC weighted, subject to the following constraints:

- No stock can have a weight of more than 10% in the index.
- No country, based on listing, can have a weight of more than 30% in the index.

Any excess weight is proportionally redistributed to uncapped constituents.

S&P Extended Frontier 150

Index Universe. The index can include a stock whose issuing company is headquartered in a frontier market, but which is listed only on foreign exchanges, such as Cambodian securities listed in Hong Kong or Kazakhstan companies that trade primarily or exclusively in the form of GDRs (Global Depositary Receipts). Generally, these stocks are considered domiciled in their home market. Whenever stocks from the countries in the Country table are listed in both their local and a developed market, preference is given to the more liquid stock when choosing new index constituents. Constituents include local listings from markets generally accessible to foreign investors. This excludes markets that lack real-time pricing, have high foreign investment restrictions or high capital gains taxes, have low overall market liquidity, have limited currency markets or have high foreign portfolio investment risk.

Selection Universe. Stocks in the index universe that satisfy the below criteria, as of the rebalancing reference date, form the selection universe:

- **Market Capitalization.** Stocks must have an FMC of at least US\$ 50 million.
- **Liquidity.** Stocks must have a minimum value traded of at least US\$ 25 million for the preceding six months (US\$ 20 million for current constituents).
- **Days Traded.** All index constituents must have traded at least 10 days per month over the previous six months.

Constituent Selection. At each rebalancing, stocks in the selection universe that satisfy the following are selected and form the index:

1. Stocks are sorted in decreasing order of their total value traded. The top 150 become index members. However, current constituents meeting all eligibility requirements will remain in the index if they fall among the top 180 companies.

Constituent Weightings. At each rebalancing, constituents are FMC weighted, subject to the following constraints:

- No stock can have a weight of more than 10% in the index.
- No country can have a weight of more than 15% in the index.

Any excess weight is proportionally redistributed to uncapped constituents.

S&P Select Frontier

Index Universe. The Index Universe consists of all the constituents of the S&P Extended Frontier 150 as of the rebalancing reference date. Constituents include listings in Hong Kong, London, and New York, as well as local listings from markets generally accessible to foreign investors. This excludes markets that lack real-time pricing, have high foreign investment restrictions or high capital gains taxes, have low overall market liquidity, have limited currency markets or have high foreign portfolio investment risk. For a complete list of eligible countries see the Country Table in this section.

Selection Universe. Stocks in the index universe that satisfy the below criteria, as of the rebalancing reference date, form the selection universe:

- **Market Capitalization.** Stocks must have an FMC of at least US\$ 100 million (US\$ 75 million for current constituents).
- **Liquidity.** Stocks must have a three-month MDVT of at least US\$ 750,000 for the preceding three months (US\$ 500,000 for current constituents).
- **Days Traded.** All index constituents must have traded at least 10 days per month over the previous six months.

The Market Capitalization, Liquidity, and Days Traded thresholds are subject to change based on market conditions at the discretion of the Index Committee.

Constituent Selection. At each rebalancing, stocks in the selection universe are sorted in decreasing order of their FMC. The top 40 become index members, subject to the constraint that there cannot be more than 12 companies from any one country.

Constituent Weightings. At each rebalancing, constituents are FMC weighted, subject to the following constraints:

- No stock can have a weight of more than 8% in the index.
- No country can have more than 12 constituents or a weight of more than 30% in the index.
- Any excess weight is proportionally redistributed to uncapped constituents.
- The minimum initial portfolio size that can be turned over in a single day (based on a three-month MDVT as of the reference date) is US\$ 100 million.

If necessary, based on market conditions, the portfolio size used to calculate basket liquidity weight may be adjusted at the discretion of the Index Committee to achieve each of the weighting criteria.

S&P Vietnam Core

Index Universe. The index universe is all stocks in the S&P Vietnam BMI.

Index Eligibility. As of the rebalancing reference date, companies in the index universe must satisfy the following criteria to be eligible for index inclusion:

- **Liquidity:** each stock must have a minimum six-month median daily value traded (MDVT) of VND 25 billion (VND 20 billion for current constituents).

Constituent Selection. At each rebalancing, the index selects a minimum of 30 eligible companies from the index universe, targeting 90% of the underlying index's FMC and subject to a selection buffer, according to the following process:

1. Rank eligible stocks in descending order by FMC and select eligible companies in order until 87% of the underlying index's FMC is met.
2. Select current constituents ranked between 87% and 93% until the 90% target is met.
3. If, after Step 2, the 90% target is not met, select the largest eligible companies in rank order until the 90% target is met.
4. If there are fewer than 30 constituents, select the largest eligible companies until the minimum stock count of 30 is met. If there are fewer than 30 eligible companies, select all eligible companies and the index contains fewer than 30 constituents.

Constituent Weightings. The index is FMC weighted, subject to a single company weight cap of 15%. Any excess weight is proportionally redistributed to the uncapped constituents.

Index Maintenance

Rebalancing

The indices rebalance according to the following schedule:

Index	Effective Date (after the close of)	Reference Date (after the close of)
S&P Frontier BMI, S&P Frontier BMI ex GCC, S&P Emerging Frontier Super Composite BMI ("Super Composite"), S&P Africa Frontier, S&P Pan Africa, and S&P Pan Eastern Europe	The indices reconstitute annually effective at the close of the third Friday of March. The emerging markets within the "Super Composite" and the S&P Pan Africa indices undergo their annual reconstitution the third Friday of September.	Last business day of January for frontier markets and last business day of July for emerging markets.
	The indices also rebalance quarterly for share changes, effective after the close of the third Fridays of June, September, and December. Emerging markets undergo share quarterly rebalancing on the third Fridays of March, June, and December.	For quarterly share rebalancings, the reference dates are after the market close five weeks prior to the open of Monday following the third Friday of March, June, September, and December.
S&P Africa 40	Third Friday of June and December.	Third Friday of May and November, respectively. The price reference date used for weighting is the Wednesday prior to the second Friday of the rebalancing month.
S&P Access Africa	Last business days of April and October.	Last business days of March and September, respectively. The price reference date used for weighting is seven business days prior to the rebalancing date.
S&P Extended Frontier 150	Annual rebalancing effective last business day of April.	Last business day of March.
	In October, index weights are reviewed to ensure that constituent weights are in compliance with the index methodology's weighting criteria. If necessary, a recapping is performed and becomes effective after the close of the last business day of October. Except for country classification changes, there are generally no additions or deletions of index constituents. For country classification changes, a full mid-year review of the index composition and constituent weights is performed and any changes resulting from this review become effective after the close of the last business day of October.	The price reference date used for weighting is seven business days prior to the rebalancing date.
S&P Select Frontier	Last trading dates of April and October.	Last trading dates of March and September, respectively. The price reference date used for weighting is seven business days prior to the rebalancing date.

Index	Effective Date (after the close of)	Reference Date (after the close of)
S&P Vietnam Core	Annual rebalancing effective at the close of the third Friday of March. In addition, quarterly re-weightings occur after the close on the third Friday of June, September, and December.	Third Friday of February. The price reference date used for weighting is the Wednesday prior to the second Friday of the rebalancing/re-weighting month.

Spin-Offs, Additions, and Deletions

S&P Frontier BMI. The index (and related sub-indices) is a market capitalization weighted index. As a result, additions or deletions of securities, and transfers or disposals of company assets (i.e., spin-offs) generally follow a treatment approach consistent with that applied to the S&P Global BMI.

S&P Access Africa. Constituents removed from the underlying index are removed from the index at next semi-annual rebalancing.

S&P Vietnam Core. Constituents removed from the underlying index are removed from the index simultaneously.

However, in a few S&P BMI Frontier Indices, the treatment of corporate actions, and their resultant effect on index calculation, differs from that of the other S&P Frontier BMI Indices:

The following table details the most frequent daily corporate events, the typical treatments, and any potential impact to the index divisor.

Index	Corporate Action	Adjustment Made to Index	Divisor Adjustment?
<ul style="list-style-type: none"> ▪ S&P Frontier BMI ▪ S&P Pan Africa ▪ S&P Frontier BMI ex GCC ▪ S&P Pan Eastern Europe ▪ S&P Emerging Frontier Super Composite BMI ▪ S&P Select Frontier ▪ S&P Extended East Africa BMI ▪ S&P Africa Frontier ▪ S&P Vietnam Core 	Spin-offs	Spun-off companies are dropped after at least one day of regular way trading in case they are deemed ineligible.	Yes
<ul style="list-style-type: none"> ▪ S&P Extended Frontier 150 ▪ S&P Select Frontier 		Spun-off companies are held and assessed at the next rebalancing.	No
<ul style="list-style-type: none"> ▪ S&P Frontier BMI ▪ S&P Pan Africa ▪ S&P Frontier BMI ex GCC ▪ S&P Pan Eastern Europe ▪ S&P Emerging Frontier Super Composite BMI ▪ S&P Select Frontier ▪ S&P Extended East Africa BMI ▪ S&P Africa Frontier ▪ S&P Extended Frontier 150 	Additions	Except for spinoffs, there are no intra-rebalancing additions.	Not Applicable

Index	Corporate Action	Adjustment Made to Index	Divisor Adjustment?
<ul style="list-style-type: none"> ▪ S&P Select Frontier ▪ S&P Vietnam Core 			
<ul style="list-style-type: none"> ▪ S&P Frontier BMI ▪ S&P Pan Africa ▪ S&P Frontier BMI ex GCC ▪ S&P Pan Eastern Europe ▪ S&P Emerging Frontier Super Composite BMI ▪ S&P Select Frontier ▪ S&P Extended East Africa BMI ▪ S&P Africa Frontier ▪ S&P Extended Frontier 150 ▪ S&P Select Frontier ▪ S&P Vietnam Core 	Deletions	Deletions due to delisting, acquisition, or any other corporate event resulting in the deletion of the stock from the index will cause the weights of the rest of the stocks in the index to change. Relative weights will stay the same.	Yes

Corporate Actions

Index-Specific Corporate Action Treatment. Except for the indices listed below, corporate action treatment for the S&P Frontier BMI is detailed in the Market Capitalization Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology:

- S&P Extended Frontier 150
- S&P Select Frontier

For the indices listed above, please refer to the Non-Market Capitalization Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Investable Weight Factor (IWF)

All constituents of the S&P Frontier BMI are assigned a float-adjustment factor, called an Investable Weight Factor (IWF). The IWF ranges between 0 and 1 and is an adjustment factor that accounts for the publicly available shares of a company. The company's adjusted market capitalization is used to determine a constituent's weight in the index.

Please refer to S&P Dow Jones Indices' Float Adjustment Methodology for a detailed description of float adjustment and Investable Weight Factor (IWF).

Other Adjustments

In cases where there is no achievable market price for a stock being deleted, it can be removed at a zero or minimal price at the Index Committee's discretion, in recognition of the constraints faced by investors in trading bankrupt or suspended stocks.

Historical Region Composition

For information on the historical composition of the Frontier BMI region, please consult the official Index Key Reference Guide available [here](#).

Currency of Calculation and Additional Index Return Series

The indices calculate in U.S. dollars.

Except for the S&P Vietnam Core Index, WMR foreign exchange rates are taken daily at 4:00 PM London Time and used in the calculation of the indices. These mid-market fixings are calculated by WMR based on LSEG data and appear on LSEG pages.

S&P Vietnam Core Index. The index calculates in U.S. dollars and Vietnamese dong, using spot exchange rates taken at 4:17 PM Sydney Time as supplied by LSEG.

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to the following: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to the [S&P DJI Methodology & Regulatory Status Database](#).

For information on the calculation of different types of indices, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at www.spglobal.com/spdji/.

Index Data

Calculation Return Types

S&P Dow Jones Indices calculates multiple return types which vary based on the treatment of regular cash dividends. The classification of regular cash dividends is determined by S&P Dow Jones Indices.

- Price Return (PR) versions are calculated without adjustments for regular cash dividends.
- Gross Total Return (TR) versions reinvest regular cash dividends at the close on the ex-date without consideration for withholding taxes.
- Net Total Return (NTR) versions, if available, reinvest regular cash dividends at the close on the ex-date after the deduction of applicable withholding taxes.

In the event there are no regular cash dividends on the ex-date, the daily performance of all three indices will be identical.

For a complete list of indices available, please refer to the daily index levels file (“.SDL”).

For more information on the classification of regular versus special cash dividends as well as the tax rates used in the calculation of net return, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

For more information on the calculation of return types, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

Index Governance

Index Committee

An Index Committee maintains the indices. All committee members are full-time professional members of S&P Dow Jones Indices' staff. The committee meets regularly. At each meeting, the Index Committee may review pending corporate actions that may affect index constituents, statistics comparing the composition of the indices to the market, companies that are being considered as candidates for addition to an index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Index Policy

Announcements

All index constituents are evaluated daily for data needed to calculate index levels and returns. All events affecting the daily index calculation are typically announced in advance via the Index Corporate Events report (.SDE), delivered daily to all clients.

For more information, please refer to the Announcements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Pro-forma Files

In addition to the corporate events file (.SDE), S&P Dow Jones Indices provides constituent pro-forma files each time the index rebalances. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents as well as their corresponding weights and index shares effective for the upcoming rebalancing. Since index shares are assigned based on prices prior to the rebalancing, the actual weight of each stock at the rebalancing will differ from these weights due to market movements.

Please visit www.spglobal.com/spdji/ for a complete schedule of rebalancing timelines and pro-forma delivery times.

Holiday Schedule

The indices are calculated daily, throughout the calendar year, provided at least one component exchange is open and trading.

A complete holiday schedule for the year is available at www.spglobal.com/spdji/.

Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Recalculation Policy

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

Contact Information

For questions regarding an index, please contact: index_services@spglobal.com.

Index Dissemination

Index levels are available through S&P Dow Jones Indices' Web site at www.spglobal.com/spdji/, major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

Tickers

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the [S&P DJI Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

Index	Return Type	BBG		RIC	
		USD	EUR	USD	EUR
S&P Frontier BMI	Price Return	IDFPFBUP	--	--	--
	Total Return	IDFPFBUT	--	--	--
	Net Total Return	IDFPFBUN	--	--	--
S&P Frontier BMI ex GCC	Price Return	IDFPFMPD	--	--	--
	Total Return	IDFTFMTD	--	--	--
	Net Total Return	--	--	--	--
S&P Emerging Frontier SuperComposite BMI	Price Return	IDGPEFUP	--	--	--
	Total Return	IDGTEFUT	--	--	--
	Net Total Return	IDGTEFUN	--	--	--
S&P Africa Frontier	Price Return	STEAI FDP	--	--	--
	Total Return	STEIAFDT	--	--	--
	Net Total Return	--	--	--	--
S&P Pan Africa	Price Return	STEIPADP	--	--	--
	Total Return	STEIPADT	--	--	--
	Net Total Return	--	--	--	--
S&P Access Africa	Price Return	SPAAUP	SPAAEP	--	--
	Total Return	SPAAUT	SPAAET	--	--
	Net Total Return	SPAAUN	SPAAEN	--	--
S&P Africa 40	Price Return	SPAFRUP	SPAFREP	.SPAFRUP	.SPARFREP
	Total Return	SPAFRUT	SPAFRET	--	--
	Net Total Return	SPAFRUN	SPAFREN	.SPAFRUN	.SPAFREN
S&P Extended Frontier 150	Price Return	SPIFCXF	--	--	--
	Total Return	SPIFCXFT	--	--	--
	Net Total Return	SPIFCXFN	--	--	--
S&P Select Frontier	Price Return	SPSF P	--	--	--
	Total Return	SPSFT	--	--	--
	Net Total Return	SPSFN	--	--	--
S&P Vietnam Core	Price Return	SPVIECUP	--	.SPVIECUP	--
	Total Return	SPVIECUT	--	.SPVIECUT	--
	Net Total Return	SPVIECUN	--	.SPVIECUN	--

Index Data

Daily constituent and index level data are available via subscription.

For product information, please contact S&P Dow Jones Indices, www.spglobal.com/spdji/en/contact-us.

Web site

For further information, please refer to S&P Dow Jones Indices' Web site at www.spglobal.com/spdji/.

Appendix I

S&P Frontier BMI History

Milestone	Effective Date
S&P GCC Indices are now calculated in a seven-day week. In addition, to the seven-day index calculation, the S&P Frontier markets began to be calculated on a daily basis; previously only weekly index values had been available.	August 16, 2008
The S&P/Citigroup Emerging and S&P/EMDB were consolidated to create the S&P Emerging BMI.	November 3, 2008
S&P Dow Jones Indices removed Zimbabwe from the S&P/IFCG Composite and related indices.	September 2009
Argentina was moved from the Emerging to the Frontier series.	September 21, 2009
Zambia and Cyprus joined the Frontier series.	December 21, 2009 and March 22, 2010 (respectively)
Colombia was removed from the Frontier series and moved into the Emerging Series.	September 19, 2011
Qatar and the United Arab Emirates were both removed from the Frontier series and moved into the Emerging Series.	September 22, 2014
Morocco removed from the Emerging to the Frontier series.	September 21, 2015
Ukraine was moved from the Frontier series to a stand-alone market.	March 21, 2016
Pakistan was removed from the Frontier series and moved into the Emerging Series.	September 18, 2017
Kuwait was removed from the Frontier series and moved into the Emerging Series.	September 23, 2019
Local listings of Argentina are ineligible due to capital control restrictions.	June 22, 2020
Lebanon was moved from the Frontier series to a stand-alone market.	June 21, 2021
Iceland joined the Frontier series.	March 21, 2022
Pakistan joined the Frontier BMI.	September 18, 2023
Nigeria removed from the Frontier series and moved to a stand-alone market.	March 18, 2024

Appendix II

Methodology Changes

Methodology changes since January 1, 2015, are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
S&P Africa 40 Index: Index Universe	03/18/2024	All the constituents of the S&P Global BMI and S&P Frontier BMI country indices for Egypt, Ghana, Kenya, Morocco, Nigeria, South Africa, and Tunisia, as well as all developed market listings of companies domiciled in Africa or that have more than 50% of their assets and operations in Africa.	All constituents of the S&P Nigeria BMI, S&P Global BMI, and S&P Frontier BMI country indices for Egypt, Ghana, Kenya, Morocco, South Africa, and Tunisia, as well as all developed market listings of African-domiciled companies, or companies that have more than 50% of total assets and operations in Africa
S&P Extended Frontier 150: Eligibility of Stocks Domiciled in Pakistan	04/30/2024	--	Local Pakistani listings are eligible index inclusion.
S&P Extended Frontier 150: Eligibility of Stocks Domiciled in Nigeria	10/31/2023	--	Nigeria-domiciled stocks are ineligible for index inclusion.
S&P Frontier BMI: Eligibility of Stocks Domiciled in Pakistan	09/30/2023	--	Local Pakistani listings are eligible for index inclusion.
S&P Select Frontier: Eligibility of Stocks Domiciled in Iceland	10/31/2022	--	Local Icelandic listings are eligible for index inclusion.
S&P Extended Frontier 150: Eligibility of Stocks Domiciled in Iceland	04/29/2022	--	Local Icelandic listings are eligible for index inclusion.
S&P Select Frontier: Liquidity	10/31/2019	All index constituents must have a minimum median daily value traded of at least US\$ 1 million for the preceding three months, as of the rebalancing reference date. Current constituents with a three-month median daily value traded of at least US\$ 750,000 remain eligible for index inclusion.	All index constituents must have a minimum median daily value traded of at least US\$ 750,000 for the preceding three months, as of the rebalancing reference date. Current constituents with a three-month median daily value traded of at least US\$ 500,000 remain eligible for index inclusion.
S&P Select Frontier: Constituent Weightings	10/31/2019	At each rebalancing, modifications are made to float-adjusted market capitalization weights to meet the following criteria: <ul style="list-style-type: none"> No stock can have a weight of more than 8% in the index. 	At each rebalancing, modifications are made to float-adjusted market capitalization weights to meet the following criteria: <ul style="list-style-type: none"> No stock can have a weight of more than 8% in the index.

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
		<ul style="list-style-type: none"> No country can have more than eight constituents or a weight of more than 30% in the index. The minimum initial portfolio size that can be turned over in a single day (based on recent trading volumes) cannot be lower than US\$ 100 million. 	<ul style="list-style-type: none"> No country can have more than 12 constituents or a weight of more than 30% in the index. The minimum initial portfolio size that can be turned over in a single day (based on recent trading volumes) cannot be lower than US\$ 100 million.
S&P Select Frontier: Liquidity Screen	04/30/2019	All stocks with a three-month average daily value traded of less than US\$ 1 million, as of the reference date, are removed (US\$ 750,000 for current constituents).	All stocks with a three-month median daily value traded of less than US\$ 1 million, as of the reference date, are removed (US\$ 750,000 for current constituents).
GICS Sector Name Change	09/21/2018	GICS Sectors are Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Telecommunication Services, Utilities, and Real Estate.	GICS Sectors are Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Communication Services, Utilities, and Real Estate.
S&P Extended East Africa BMI: Index Construction	09/21/2018	The index is constructed as a composite of the BMI country indices for Kenya, Malawi, Uganda, Rwanda, and Tanzania.	The index is constructed as a composite of the BMI country indices for Kenya, Uganda, Rwanda, and Tanzania.
Trading History Requirement for Initial Public Offerings (IPOs)	06/15/2018	--	IPOs must have a trading history of at least three months as of the rebalancing reference date.
S&P Extended Frontier 150: Mid-Year Review	04/30/2018	In mid-October, index weights are reviewed to ensure that the weight parameters meet methodology requirements. Generally, there are no additions or deletions of constituents at this time. If necessary, a recapping is performed and becomes effective after the close of the last business day of October.	In mid-October, index weights are reviewed to ensure that constituent weights are in compliance with the index methodology's weighting criteria. If necessary, a recapping is performed and becomes effective after the close of the last business day of October. Except for country classification changes, there are generally no additions or deletions of index constituents. For country classification changes, a full mid-year review of the index composition and constituent weights is performed and any changes resulting from this review become effective after the close of the last business day of October.
S&P Extended Frontier 150: Constituent Selection Buffer	05/01/2017	Current constituents meeting all eligibility requirements may remain in the index even if they do not fall among the top 150 companies.	Current constituents meeting all eligibility requirements will remain in the index if they fall among the top 180 companies.
S&P Select Frontier: Constituent Selection Buffers	03/31/2016	--	Current constituents with float-adjusted market capitalizations of at least US\$ 75 million remain eligible for index inclusion. Current constituents with a three-month average daily value traded of at least US\$ 750,000 remain eligible for index inclusion.

Appendix III

ESG Disclosures

EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL & GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY³	
1.	Name of the benchmark administrator. S&P Dow Jones Indices LLC.
2.	Underlying asset class of the ESG benchmark.⁴ N/A
3.	Name of the S&P Dow Jones Indices benchmark or family of benchmarks. S&P DJI Equity Indices Benchmark Statement
4.	Do any of the indices maintained by this methodology take into account ESG factors? No
Appendix latest update: January 2021	
Appendix first publication: January 2021	

³ The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

⁴ The 'underlying assets' are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

Disclaimer

Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients by providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history

will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any 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 investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

Intellectual Property Notices/Disclaimer

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. (“S&P Global”) or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC (“Dow Jones”). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, “promoter” (as defined in the Investment Company Act of 1940, as amended) or “expert” as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof (“Content”) may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively “S&P Dow Jones Indices Parties”) do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN “AS IS” “WHERE IS” BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL

EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content 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. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.

Some indices use the Global Industry Classification Standard (GICS®), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use

thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.

ESG Indices Disclaimer

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy or completeness of such ESG scores, ratings, or data. No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled

objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.