

**S&P Dow Jones  
Indices**

A Division of **S&P Global**

# **S&P Frontier Indices** *Methodology*

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# Introduction

## Index Objective

The S&P Frontier Indices measure the performance of selected smaller and less liquid equity markets.

*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.spdji.com](http://www.spdji.com).*

## 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 Nigeria Select, S&P Pan Africa ex South Africa Select, S&P Sub Saharan Africa ex South Africa Select and S&P Select Frontier Indices are designed to be composed of liquid, tradable stocks. Within each index, constituents must meet minimum size and liquidity requirements to ensure investability and tradability. These indices follow a capped market capitalization weighted scheme to ensure diversified exposure. 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, even by emerging market standards. Each country sub-index contains all publicly listed equities with the objective of meeting 80% total market capitalization, subject to size and liquidity. 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, Latvia, Lithuania, Romania, the Slovak Republic, and Slovenia in Europe; Bahrain, Botswana, Côte d'Ivoire, Ghana, Kazakhstan, Kenya, Kuwait, Jordan, Lebanon, Mauritius, Morocco, Namibia, Nigeria, Oman, Tunisia, Zambia in the Middle East and Africa; and Bangladesh, 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, Kuwait, and Oman. 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. See the Appendix for more on the history of the S&P Frontier BMI.
- **S&P Access Africa.** The index consists of the largest and most liquid securities that operate purely in or derive over 50% of their revenues from Africa. All companies trading on the Johannesburg stock exchange and all African domiciled companies listed in developed market that have the majority of their assets and operations in Africa are eligible for inclusion subject to meeting all other eligibility criteria. The index limits the number of companies from any single country to 20 stocks, based on country of listing.

- **S&P Africa 40.** The index provides exposure to 40 of the largest, most liquid companies that operate purely in Africa. It limits the number of companies from any single country to eight and includes developed market listings of companies domiciled in Africa or that have the majority 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, Nigeria and Zambia frontier African countries.
- **S&P Emerging Frontier Super Composite BMI.** The index was created in November 2008 and is the 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. The index is weighted by float-adjusted market capitalization.
- **S&P Extended Frontier 150.** The index consists of the 150 largest and most liquid companies from over 30 countries.
- **S&P Nigeria Select.** The index consists of the largest and most liquid securities included in the S&P Nigeria BMI. **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, Nigeria, South Africa, Tunisia and Zambia.
- **S&P Pan Africa ex South Africa.** The index consists of the S&P Pan Africa composition, excluding South African stocks.
- **S&P Pan Africa ex South Africa Select.** The index consists of the largest and most liquid securities included in the S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI. **S&P Sub Saharan Africa ex South Africa Select.** The index consists of the largest and most liquid securities included in the S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI, while excluding stocks from the North African countries of Egypt, Morocco, and Tunisia.
- **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 London, Hong Kong and New York, as well as local listings from markets generally accessible to foreign investors.
- **Stand-Alone Country Indices.** Country indices for Malawi, Palestine, Uganda, Ukraine, Rwanda, Tanzania and Zimbabwe are not eligible for the S&P Frontier BMI but do follow all the same eligibility criteria as defined in the sections below.

## 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.*

For index level calculations, the S&P Frontier BMI, S&P Frontier BMI ex GCC, S&P Africa Frontier, S&P Pan Africa, S&P Pan Africa ex South Africa, S&P Pan Eastern Europe, and S&P Emerging Frontier Super

Composite BMI all follow the same index methodology. These indices are float-adjusted market capitalization weighted indices.

The S&P Access Africa, S&P Africa 40, S&P Extended Frontier 150, S&P Nigeria Select, S&P Pan Africa ex South Africa Select, S&P Sub Saharan Africa ex South Africa Select and S&P Select Frontier employ a capped market capitalization-weighting scheme, using the divisor methodology used in S&P Dow Jones Indices' equity indices. Modifications are made to market capitalization weights, if required, to reflect available float, reduce single country and stock concentration and enhance index basket liquidity.

*For more information on index calculations, please refer to S&P Dow Jones Indices' Index Mathematics 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	<a href="#">Equity Indices Policies &amp; Practices</a>
S&P Dow Jones Indices' Index Mathematics Methodology	<a href="#">Index Mathematics Methodology</a>
S&P Dow Jones Indices' Float Adjustment Methodology	<a href="#">Float Adjustment Methodology</a>
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	<a href="#">GICS Methodology</a>
S&P Dow Jones Indices' Country Classification Methodology	<a href="#">Country Classification Methodology</a>

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

## 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:

**Market Capitalization.** Market capitalization requirements are defined at the share class level, as of the reference date preceding the annual reconstitution or other rebalancing.

- **S&P Frontier BMI.** Stocks follow market size tier rules for the market capitalization criterion, as defined in *Reconstitution/Rebalancing* in the next section.
- **S&P Access Africa.** Stocks must have a float-adjusted market capitalization above US\$ 200 million
- **S&P Africa 40.** Stocks must have a float-adjusted market capitalization above US\$ 100 million.
- **S&P Extended Frontier 150.** Stocks must have at least US\$ 50 million in float-adjusted market capitalization.
- **S&P Nigeria Select.** Stocks must have at least US\$ 200 million in float-adjusted market capitalization. Current constituents with float-adjusted market capitalizations of at least US\$ 180 million remain eligible for index inclusion.

- **S&P Select Frontier.** Stocks must have at least US\$ 100 million in float-adjusted market capitalization. Current constituents with float-adjusted market capitalizations of at least US\$ 75 million remain eligible for index inclusion.
- **S&P Pan Africa ex South Africa Select.** Stocks follow market size tier rules based on their region for float-adjusted market capitalization criterion, as defined in *Reconstitution/Rebalancing* in the next section.
- **S&P Sub Saharan Africa ex South Africa Select.** Stocks follow market size tier rules based on their region for float-adjusted market capitalization criterion, as defined in *Reconstitution/Rebalancing* in the next section.

**Liquidity.** To ensure the highest liquidity possible, value traded from multiple listings is analyzed for each company. Only the listing with the highest liquidity is selected.

- **S&P Frontier BMI.** Stocks follow market size tier rules for the value traded criterion, as defined in *Reconstitution/Rebalancing* in the next section.
- **S&P Access Africa.** Stocks must have three-month average daily value traded above US\$ 1 million as of the rebalancing reference date. For this index, only developed market listings and Johannesburg Stock Exchange listings are considered.
- **S&P Africa 40.** Stocks must have three-month average daily value traded above US\$ 1 million as of the rebalancing data reference date.
- **S&P Extended Frontier 150.** All new index constituents must have a minimum value traded of US\$ 25 million for the preceding six months, as of the rebalancing reference date. Current constituents are dropped from the index if their six months value traded falls below US\$ 20 million.
- **S&P Nigeria Select.** All new index constituents must have a minimum value traded of US\$ 25 million for the preceding six months, as of the rebalancing reference date. Current constituents are dropped from the index if their six months value traded falls below US\$ 22.5 million.
- **S&P Select Frontier.** All index constituents must have a minimum average daily value traded of US\$ 1 million for the preceding three months, as of the rebalancing reference date. Current constituents with a three-month average daily value traded of at least US\$ 750,000 remain eligible for index inclusion.
- **S&P Pan Africa ex South Africa Select.** Stocks follow median daily value traded tier rules based on the region for the liquidity criterion, as defined in *Reconstitution/Rebalancing* in the next section.
- **S&P Sub Saharan Africa ex South Africa Select.** Stocks follow median daily value traded tier rules based on the region for the liquidity criterion, as defined in *Reconstitution/Rebalancing* in the next section.

**Days Traded.** The rules for days traded are detailed below.

- **S&P Frontier BMI.** Stocks follow market size tier rules for the days traded criterion as defined in *Reconstitution/Rebalancing* in the next section. In addition to the tier rules, the last 12 months of days traded prior to the annual rebalancing reference date are reviewed to understand the status of a security, in case it is a recently listed IPO or if it has been suspended.
- **S&P Access Africa.** There is no minimum number of days traded required for this index.
- **S&P Africa 40.** There is no minimum number of days traded required for this index.
- **S&P Extended Frontier 150.** All index constituents must have traded 10 or more days over each of the previous six months prior to the rebalancing.
- **S&P Nigeria Select.** All index constituents must have traded 10 or more days over each of the previous six months prior to the rebalancing.



- **S&P Select Frontier.** All index constituents must have traded 10 or more days over each of the previous six months prior to the rebalancing.
- **S&P Pan Africa ex South Africa Select.** All index constituents must have traded at least 70% of the total number of days the respective exchange was open over the previous six months prior to the rebalancing.
- **S&P Sub Saharan Africa ex South Africa Select.** All index constituents must have traded at least 70% of the total number of days the respective exchange was open over the previous six months prior to the rebalancing.

**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 next quarterly rebalancing. A stock can be added only if the practical available limit is 10% or more. All stocks are reviewed for this at each rebalancing.

**Investability.** Markets that have broad foreign investment restrictions are excluded. Saudi Arabia currently applies such restrictions and is not included in any of the indices' universe.

**Float-Adjustment.** A stock's weight in an index is determined by its float-adjusted market capitalization.

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

**Domicile.** Domicile rules are detailed below.

- **S&P Frontier BMI.** The index is intended to represent the performance of the most active securities in their respective stock markets and to be the broadest possible indicator of market movements. All local exchange-listed stocks are eligible for inclusion in the S&P Frontier BMI Indices, subject to size and liquidity rules.
- **S&P Africa 40.** Companies must be domiciled in Africa or have the majority of their assets and operations in Africa.
- **S&P Access Africa.** All index constituents of the S&P South Africa BMI are eligible, as well as all developed market listings of companies domiciled in Africa and/or that have the vast majority of their assets and operations in Africa.
- **S&P Nigeria Select.** As a sub-index of the S&P Nigeria BMI, all local exchange-listed stocks are eligible for inclusion, subject to meeting size and liquidity thresholds.
- **S&P Pan Africa ex South Africa Select.** The index is intended to represent the performance of the most liquid securities in the S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI. All local exchange-listed stocks are eligible for inclusion, subject to size and liquidity rules.
- **S&P Sub Saharan Africa ex South Africa Select.** The index is intended to represent the performance of the most liquid securities in the S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI, while excluding North African stocks. All local exchange-listed stocks are eligible for inclusion, subject to size and liquidity rules.
- **S&P Select Frontier.** All frontier markets are considered for inclusion, subject to listing, size and liquidity rules.

- S&P Extended Frontier 150 and S&P Select Frontier.** The indices 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. Generally, these stocks are considered domiciled in their home market. Whenever stocks from the countries in the table below are listed in their local and in a developed market, preference is given to the more liquid stock when choosing new index constituents.

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 Africa Frontier	S&P Pan Africa	S&P Pan Eastern Europe
ARGENTINA	•	•			
BAHRAIN	•				
BANGLADESH	•	•			
BOTSWANA	•	•	•	•	
BULGARIA	•	•			
CAMBODIA					
CONGO					
CÔTE D'IVOIRE	•	•	•	•	
CROATIA	•	•			
CYPRUS	•	•			•
CZECH REPUBLIC					•
ECUADOR	•	•			
EGYPT				•	
ESTONIA	•	•			•
GABON					
GEORGIA					
GHANA	•	•	•	•	
GUINEA					
HUNGARY					•
JAMAICA	•	•			
JORDAN	•	•			
KAZAKHSTAN	•	•			
KENYA	•	•	•	•	
KUWAIT	•				
LATVIA	•	•			
LEBANON	•	•			
LITHUANIA	•	•			
MALI					
MAURITIUS	•	•	•	•	
MOROCCO	•	•		•	
NAMIBIA	•	•	•	•	
NIGERIA	•	•	•	•	
OMAN	•				
PANAMA	•	•			
POLAND					•
ROMANIA	•	•			•
SIERRA LEONE					
SLOVAKIA	•	•			
SLOVENIA	•	•			•
SOUTH AFRICA				•	
SRI LANKA	•	•			
TRINIDAD AND TOBAGO	•	•			
TUNISIA	•	•		•	
UKRAINE					
VIETNAM	•	•			
ZAMBIA	•	•	•	•	
TOTALS	34	31	8	12	7

Country Name	S&P Access Africa	S&P Africa 40	Extended Frontier 150	S&P Select Frontier	S&P Nigeria Select
ARGENTINA			▲	▲	
BAHRAIN			‡	‡	
BANGLADESH			•	▲	
BOTSWANA	▲	▲	•	▲	
BULGARIA			▲	▲	
CAMBODIA			▲	▲	
CONGO	†	†			
CÔTE D'IVOIRE	▲	▲	•	▲	
CROATIA			•	•	
CYPRUS			•	•	
ECUADOR			▲		
EGYPT	•	•			
ESTONIA			•	▲	
GABON	†	†			
GEORGIA			▲	▲	
GHANA	▲	•	•	▲	
GUINEA	†	†			
JAMAICA			▲		
JORDAN			•	•	
KAZAKHSTAN			▲	▲	
KENYA	•	•	•	▲	
KUWAIT			•	•	
LATVIA			•	▲	
LEBANON			•	•	
LITHUANIA			•	•	
MALI	†	†			
MAURITIUS	▲	▲	•	▲	
MOROCCO	•	•	•	•	
NAMIBIA	▲	▲	▲	▲	
NIGERIA	•	•	•	•	•
OMAN			•	•	
PANAMA			▲	▲	
ROMANIA			•	•	
SIERRA LEONE	†	†			
SLOVAKIA			•	▲	
SLOVENIA			•	▲	
SOUTH AFRICA	•	•			
SRI LANKA			•	▲	
TRINIDAD AND TOBAGO			▲		
TUNISIA	•	•	•	▲	
UKRAINE			‡	▲	
VIETNAM			•	•	
ZAMBIA	▲	▲	▲	▲	
TOTALS	17	17	36	33	

- 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.

Note: Colombia was promoted to Emerging market effective September 19, 2011.

Qatar and United Arab Emirates were promoted to Emerging market effective September 19, 2014.

Morocco was reclassified to Frontier market effective September 21, 2015.

Ukraine was reclassified to a stand-alone market effective March 21, 2016.

Pakistan was promoted to Emerging market effective September 18, 2017.

**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 not eligible for inclusion in any of the S&P Frontier indices featured in this document:

- Closed-end funds
- Convertible bonds
- Equity warrants
- Fixed-dividend shares
- Investment trusts
- Limited Partnerships
- Mutual fund shares
- Unit trusts
- Business Development Companies (BDCs)

**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.

For market capitalization and, therefore, weighting purposes, the **S&P Access Africa**, **S&P Africa 40**, **S&P Extended Frontier 150**, **S&P Nigeria Select** and **S&P Select Frontier** indices use shares by class in determining shares outstanding. If a class of shares is selected for any of these indices principally due to its trading activity, but other share classes of the same issuer are not selected, only the selected share class' market capitalization is included in the respective index, not the company's entire share capital.

*For additional information on Multiple Share Classes, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.*

**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.

**Sector Classification.** Stocks are classified by the Global Industry Classification Standard (GICS®) – a four-tiered industry classification structure. GICS Sectors are Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Telecommunication Services, Utilities and Real Estate.

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

# Index Construction

## Approaches

The S&P Frontier BMI index is constructed on a top-down basis, with the objective of meeting 80% of total market capitalization, subject to size and liquidity rules defined by three market size tiers.

The S&P Africa Frontier, S&P Pan Africa and S&P Pan Eastern Europe indices follow the same approach as their parent index, the S&P Frontier BMI.

The S&P Africa 40, S&P Access Africa, S&P Extended Frontier 150, S&P Nigeria Select, S&P Pan Africa ex South Africa Select, S&P Sub Saharan Africa ex South Africa Select and S&P Select Frontier employ a capped market capitalization-weighting scheme. Modifications are made to market cap weights, if required, to reflect available float, reduce single country and stock concentration and enhance index basket liquidity.

## Index Calculations

The index is calculated 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.*

## Reconstitution/Rebalancing

All indices in this series undergo either an annual or semi-annual review of the entire index portfolio. At these times, new constituents are added and constituents no longer meeting eligibility criteria are removed. In some instances, the indices may undergo a re-weighting, with no composition changes, in order to align constituent weights to meet index weight criteria. For more details see each index section below.

For the tradable indices, such as the S&P Africa 40, S&P Access Africa, S&P Extended Frontier 150, S&P Nigeria Select, S&P Pan Africa ex South Africa Select, S&P Sub Saharan Africa ex South Africa Select and S&P Select Frontier, S&P Dow Jones Indices believes turnover in index membership should be avoided when possible. At times a company may appear to temporarily violate one or more of the addition criteria. However, the addition criteria are for addition to an index, not for continued membership. As a result, an index constituent that appears to violate criteria for addition to that index is not deleted unless ongoing conditions warrant an index change. This buffer rule does not apply to purely rule-based indices such as the S&P Frontier BMI Indices.

## S&P Frontier BMI

At each annual reconstitution, all local exchange-listed stocks are eligible for inclusion in the S&P Frontier BMI Indices. Frontier-market stocks trading in developed markets are also eligible if this is their only listing. Selection of eligible stocks is made, with the objective of meeting 80% total market capitalization, subject to size and liquidity rules defined by three market size tiers. Where 80% is not met, stocks that fall below the size and liquidity thresholds defined by the tiers are considered for inclusion. Final composition is greatly dependent on the specific frontier market; pending all selection criteria, market coverage can differ greatly from market to market.

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

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

## **S&P Africa 40**

There are two steps in the creation of the S&P Africa 40. The first is the selection of the 40 companies; the second is the weighting of the index constituents.

### **Constituent Selection**

1. The initial selection universe consists of all 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 who have the vast majority of their assets and operations in Africa.
2. All stocks with a float-adjusted market capitalization of less than US\$ 100 million (the “Market Cap Threshold”) and/or average three-month daily value traded of less than US\$ 1 million (the “Liquidity Threshold”) are removed.
3. The remaining stocks are sorted in decreasing order of their float-adjusted market capitalization. The top 40 become index members, subject to the constraint that there can be no more than eight companies from any particular country. If any particular country’s company count exceeds eight the next largest eligible stock from a country that does not yet have eight constituents is chosen.

The Market Cap Threshold and Liquidity Threshold are subject to change based on market conditions. If there are not a minimum of 40 eligible companies at the time of the review one or more of the eligibility requirements may be relaxed to ensure 40 constituents.

### **Constituent Weightings**

At each rebalancing modifications are made to market capitalization weights to meet the following criteria:

- No stock can have a weight of more than 8% in the index.
- No country can have a weight 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\$ 200 million

## **S&P Access Africa**

There are two steps in the creation of the S&P Access Africa. The first is the selection of the companies; the second is the weighting of the index constituents.

### **Constituent Selection**

1. The initial selection universe consists of all constituents of the S&P South Africa BMI, and all developed market listings of companies domiciled in Africa and/or that have the vast majority of their assets and operations in Africa. Data for determining the Assets and operations based in Africa for developed market listings is reviewed once a year after the close of the last business day in July.
2. All stocks with a float-adjusted market capitalization of less than US\$ 200 million (the "Market Cap Threshold") and/or average three-month daily value traded of less than US\$ 1 million (the "Liquidity Threshold") are removed. The remaining stocks form the Selection Universe.
3. The Selection Universe is subject to the constraint that there can be no more than 20 companies from any particular country of listing. If any particular country's company count exceeds 20 the next largest eligible stock from a country that does not yet have 20 constituents is chosen.

The Market Cap Threshold and Liquidity Threshold are subject to change based on market conditions.

### **Constituent Weightings**

At each rebalancing, modifications are made to float-adjusted market capitalization weights to meet the following criteria:

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



## **S&P Extended Frontier 150**

The index undergoes an annual rebalancing where the entire index portfolio is reviewed for additions and/or deletions. In addition, the index undergoes a mid-year review, where the index portfolio is reviewed to ensure that the weight parameters are in line with the criteria described below. During the mid-year review, no new additions or deletions are made.

### **Constituent Selection**

1. 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 under the *Eligibility Criteria* section.
2. All stocks not meeting the stock level inclusion criteria detailed under *Eligibility Criteria* are removed.
3. If a company has multiple share classes, the share class with the lower liquidity is removed.
4. The remaining 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.
5. The Market Cap Threshold, Liquidity Threshold, and Days Traded Threshold are subject to change based on market conditions.

### **Constituent Weightings**

At each rebalancing, modifications are made to float-adjusted market capitalization weights to meet the following criteria:

- 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.

## **S&P Nigeria Select**

### **Constituent Selection**

1. The initial selection universe consists of all the constituents of the S&P Nigeria BMI.
2. All stocks with a float-adjusted market capitalization of less than US\$ 200 million (the “Market Cap Threshold”) are removed. Existing constituents remain in the index if their float-adjusted market capitalization is at least US\$ 180 million.
3. All stocks with six month value traded of less than US\$ 25 million (the “Liquidity Threshold”) are removed. Existing constituents remain in the index if their six month value traded is at least US\$ 22.5 million.
4. All stocks that traded less than 10 days per month over the prior six months (the “Days Traded Threshold”) are removed.
5. The remaining stocks become index members.

The Market Cap Threshold, Liquidity Threshold, and Days Traded Threshold are subject to change based on market conditions.

### **Constituent Weightings**

At each semi-annual rebalancing, modifications are made to float-adjusted market capitalization weights, if necessary, so that no stock can have a weight of more than 20% in the index.

## S&P Select Frontier

Potential candidates for the index rebalancings are drawn from constituents of the latest S&P Extended Frontier 150 as of the rebalancing reference date.

### Constituent Selection

All constituents of S&P Extended Frontier 150 comprise the initial selection universe.

1. Constituents include listings in London, Hong Kong 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 under the *Eligibility Criteria* section.
2. All stocks with a float-adjusted market capitalization of less than US\$ 100 million (the “Market Cap Threshold”), as of the reference date, are removed. Existing constituents remain in the index if their float-adjusted market capitalization is at least US\$ 75 million.
3. All stocks with a three-month average daily value traded of less than US\$ 1 million (the “Liquidity Threshold”), as of the reference date, are removed. Existing constituents remain in the index if their three-month average daily value traded is at least US\$ 750,000 million.
4. All stocks with at least one month of fewer than 10 days traded in the last six months (the “Days Traded Threshold”), as of the reference date, are removed.
5. If a company has multiple share classes, or developed market listing the share class with the lower liquidity is removed.
6. The remaining stocks are sorted in decreasing order of their float-adjusted market capitalization. The top 40 become index members, subject to the constraint that there cannot be more than eight companies from any one country.

The Market Cap Threshold, Liquidity Threshold, Days Traded Threshold and number of constituents are subject to change based on market conditions.

### Constituent Weightings

At each rebalancing, modifications are made to float-adjusted market capitalization weights to meet the following criteria:

- No stock can have a weight of more than 8% in the index.
- 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.

## S&P Pan Africa ex South Africa Select

Potential candidates for the index rebalancings are drawn from constituents of the latest S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI as of the rebalancing reference date.

### Constituent Selection

All constituents of S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI comprise the initial selection universe. The index includes Zimbabwe since September 2011, the base date of the S&P Zimbabwe BMI.

The constituent selection rules for addition of new members to the index are listed below. In order to avoid turnover in index membership, buffers are used for current index constituents.

1. All stocks with a float-adjusted market capitalization of less than the Market Cap Threshold of their region as of the reference date are removed.

Region	Market Cap Threshold	Buffer
North Africa	US\$ 400 million <sup>1</sup>	US\$ 350 million <sup>1</sup>
West Africa		
Southern Africa	US\$ 200 million <sup>2</sup>	US\$ 150 million <sup>2</sup>
East Africa		

2. All stocks with median six-month daily value traded of less than their regional Liquidity Threshold as of the reference date are removed.

Region	Median Liquidity Threshold	Buffer
North Africa	US\$ 200,000	US\$ 150,000
West Africa		
Southern Africa	US\$ 150,000	US\$ 100,000
East Africa		

3. All stocks that have not traded on at least 70% of the total number of days the exchange was open in the last six months (the "Days Traded Threshold") as of the reference date, are removed.<sup>3</sup>
4. If a company has multiple share classes, the share class with less liquidity as defined by median six-month daily value traded is removed.
5. If no stocks from a country meet the Median Liquidity Threshold, the most liquid stock by median six-month daily value traded is selected for inclusion provided it meets the Days Traded Threshold of 60%. If no stock in a country meets the Days Traded Threshold, that country is not represented in the index.

The Market Cap Threshold, Liquidity Threshold, Days Traded Threshold and number of constituents are subject to change based on market conditions.

<sup>1</sup> Prior to 2014, the market cap threshold and buffer were US\$ 300 million and US\$ 250 million, respectively.

<sup>2</sup> Prior to 2014, the market cap threshold and buffer were US\$ 150 million and US\$ 125 million, respectively.

<sup>3</sup> For Egypt, the Days Traded Threshold was lowered to 50% in 2011 due to an extended closure of the Egyptian Exchange.

## **Constituent Weightings**

At each rebalancing, modifications are made to float-adjusted market capitalization weights to meet the following criteria:

1. No stock's weight in the index can exceed 10%.
2. The sum of stocks with a weight greater than 5% is limited to an aggregate 40% weight.
3. No country's weight in the index can exceed 30%.
4. No sector's weight in the index can exceed 40%.

The weight of any stock in the index is capped at 2X the stock's float-adjusted market capitalization weight. However this constraint may be relaxed if needed to meet the other weighting criteria. The 2X stock cap will increase by a factor of 1 until all rules have been satisfied.

Constituent weights are optimized to the extent possible in order to minimize the differences between the natural float-adjusted market cap weights and the capped weights.

## S&P Sub Saharan Africa ex South Africa Select

Potential candidates for the index rebalancings are drawn from constituents of the latest S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI as of the rebalancing reference date. Stocks from the North African countries of Egypt, Morocco, and Tunisia are excluded from index consideration.

### Constituent Selection

All constituents of the S&P Pan Africa ex South Africa and the S&P Zimbabwe BMI, excluding stocks from Egypt, Morocco, and Tunisia comprise the initial selection universe. The index includes Zimbabwe since September 2011, the base date of the S&P Zimbabwe BMI.

The constituent selection rules for addition of new members to the index are listed below. In order to avoid turnover in index membership, buffers are used for current index constituents.

1. All stocks with a float-adjusted market capitalization of less than US\$ 150 million as of the reference date are removed. Current index constituents must have a float-adjusted market capitalization greater than US\$ 100 million as of the reference date to remain in the index.
2. All stocks with median six-month daily value traded of less than their regional Liquidity Threshold as of the reference date are removed.

Region	Median Liquidity Threshold	Buffer
West Africa	US\$ 50,000	US\$ 25,000
Southern Africa	US\$ 25,000	US\$ 10,000
East Africa		

If an otherwise eligible stock does not meet the above liquidity requirement, but has a dual listing on the Johannesburg Stock Exchange that does meet the above requirements, then the local listing will be included in the index as long as it meets all other eligibility criteria.

3. All stocks that have not traded on at least 70% of the total number of days the exchange was open in the last six months (the “Days Traded Threshold”) as of the reference date, are removed.
4. If a company has multiple share classes, the share class with less liquidity as defined by median six-month daily value traded is removed.
5. If no stocks from a country meet the Median Liquidity Threshold, the most liquid stock by median six-month daily value traded is selected for inclusion provided it meets the Days Traded Threshold of 60%. If no stock in a country meets the Days Traded Threshold, that country is not represented in the index.
6. If no stocks from a sector meet the Median Liquidity Threshold, the most liquid stock by median six-month daily value traded is selected for inclusion provided it meets the Days Traded Threshold of 60%. If no stock in a sector meets the Days Traded Threshold of 60%, that sector is not represented in the index.
7. The number of stocks from the same country and sector combination is limited to five. If the number of stocks from the same country and sector combination exceeds five, the least liquid stocks are removed.
8. Current index constituents that do not pass the buffer thresholds for size, liquidity, and days traded specified above will remain in the index if they rank within the top two stocks per country and sector combination and have a median six-month daily value traded greater than US\$ 20,000 and exceed the Days Traded Threshold of 60%.

The Market Cap Threshold, Liquidity Threshold, Days Traded Threshold and number of constituents are subject to change based on market conditions.

## **Constituent Weightings**

The weighting criteria for the index are set as follows:

1. No stock's weight in the index can exceed 10%.
2. No country's weight in the index can exceed 40%.
3. No sector's weight in the index can exceed 40%.

The weight of any stock in the index is capped at 2X the stock's float-adjusted market capitalization weight. However this constraint may be relaxed if needed to meet the other weighting criteria. The 2X stock cap will increase by a factor of 1 until all rules have been satisfied.

Constituent weights are optimized to the extent possible in order to minimize the differences between the natural float-adjusted market cap weights and the capped weights.

# Index Maintenance

## Rebalancing

The table below indicates the rebalancing effective dates and reference dates for each of the indices featured in this methodology.

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, S&P Pan Africa ex South Africa and S&P Pan Eastern Europe	The indices are reconstituted annually effective at the close of the third Friday of March. The <u>emerging</u> 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 are also rebalanced quarterly for share changes effective at the close of the third Fridays of March, June and September. Emerging markets also undergo share quarterly rebalancing on the third Fridays of March, June and December.	For quarterly share rebalancing, the reference dates correspond to the second Friday of each calendar quarter.
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 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.	The price reference date used for weighting is seven business days prior to the rebalancing date.
S&P Nigeria Select	Last trading dates of January and July.	Last trading dates of December and June, respectively. The price reference date used for weighting is seven business days prior to the rebalancing date.



<b>Index</b>	<b>Effective Date (after the close of)</b>	<b>Reference Date (after the close of)</b>
S&P Pan Africa ex South Africa Select and S&P Sub Saharan Africa ex South Africa Select	The indices are reconstituted semi-annually effective at the close of the third Friday of March and September.	Last business day of February and August, respectively.
	In June and December, 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 third Friday of the month.	The price reference date used for weighting is the Wednesday prior to the second Friday of the re-weighting month.
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.

### **Historical Region Composition**

For information on the historical composition of the Frontier BMI region, please consult the official Index Key Reference Guide available at <http://us.spindices.com/client-services/document-center/s-p-dow-jones-indices-universal-file-format-uff->.

### **Currency, Currency Hedged, and Risk Control Indices**

The indices are calculated in U.S. dollars.

WM/Reuters 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 The WM Company based on Reuters data and appear on Reuters pages WMRA.

Additional currency, currency hedged, and risk control versions of an index may be available. For a list of available currency, currency hedged, and risk control indices, please contact Client Services at [index\\_services@spglobal.com](mailto:index_services@spglobal.com).

*For more information on currency, currency hedged, and risk control indices, please refer to S&P Dow Jones Indices' Index Mathematics 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).*

### **Corporate Actions**

Maintenance includes monitoring and completing the adjustments for company additions and deletions, share changes, stock splits, stock dividends, and stock price adjustments due to restructurings or spin-offs. Some corporate actions, such as stock splits and stock dividends, require simple changes in the common shares outstanding and the stock prices of the companies in the index. Other corporate actions, such as share issuances, additions or deletions, change the market value of the index and require an index divisor adjustment to prevent the value of the index from changing.

For more information on Corporate Actions, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

**Bankruptcies and Stock Suspensions.** For information on Bankruptcies and Stock Suspensions, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

**S&P Frontier BMI.** The index (and its sub-indices) is a market-cap weighted index. As a result, most additions, deletions, IPOs, and spin-offs are treated in the same way they are applied to the S&P Global BMI.

For more information, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

The S&P Africa 40, S&P Access Africa, S&P Extended Frontier 150, S&P Nigeria Select and S&P Select Frontier follow a capped market-cap weighted methodology. This means that some corporate actions are applied differently than is done for the S&P Frontier BMI indices. The following table details the most frequent daily corporate events, the typical treatments and impact to the index divisor.

Corporate Action	Adjustment Made to Index	Divisor Adjustment?
Spin-off	Please refer to the Treatment of Spin-offs in S&P Dow Jones Indices' Equity Indices Policies & Practices document.	
Rights Offering	The price is adjusted to the Price of the Parent Company minus (the Price of the Rights Offering/Rights Ratio). Index shares change so that the company's weight remains the same as its weight before the rights offering.	No
Stock Dividend, Stock split, Reverse Stock Split	Index shares are multiplied by and price is divided by the split factor.	No
Share Issuance, Share Repurchase, Equity Offering or Warrant Conversion	None.	No
Special Dividends	Price of stock making the special dividend payment is reduced by the per share special dividend amount after the close of trading on the day before the dividend ex-date.	Yes
Constituent Change	Except for spinoffs, there are no intra-rebalancing additions.	-
	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

For specific information regarding treatment for these, and all other, corporate actions, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.

# 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 document.*

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

# Index Governance

## **Index Committee**

The indices are maintained by an Index Committee. 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 document.*

# 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 via ftp to all clients. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

All methodology changes are posted to the S&P Dow Jones Indices' Web site and announced via email to all clients. The latest available version is always posted on our Web site at [www.spdji.com](http://www.spdji.com).

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

## **Pro-forma Files**

In addition to the corporate events file, S&P Dow Jones Indices provides constituent pro-forma files each time the indices rebalance. The file is provided on a quarterly basis (March, June, September and December) for the S&P Frontier BMI and related indices, on a semi-annual basis for the S&P Africa 40, (June and December), S&P Extended Frontier 150 and S&P Select Frontier and S&P Nigeria Select indices (January and July).

*Please visit [www.spdji.com](http://www.spdji.com) 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.spdji.com](http://www.spdji.com).*

## **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 document.

## **Recalculation Policy**

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

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

**Contact Information**

For questions regarding an index, please contact: [index\\_services@spglobal.com](mailto:index_services@spglobal.com).

# Index Dissemination

Index levels are available through S&P Dow Jones Indices' Web site at [www.spdji.com](http://www.spdji.com), 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 currency, currency hedged, risk control, and return type versions of the below indices that may exist are also covered by this document. Please contact [index\\_services@spglobal.com](mailto:index_services@spglobal.com) for a complete list of indices covered by this document.

Index	Return Type	Bloomberg		Reuters	
		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	STEAFIDP	--	--	--
	Total Return	STEAFIDT	--	--	--
	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 Nigeria Select	Price Return	SPNISUP	SPNISEP	--	--
	Total Return	SPNISUT	SPNISET	--	--
	Net Total Return	SPNISUN	SPNISEN	--	--
S&P Select Frontier	Price Return	SPSFP	--	--	--
	Total Return	SPSFT	--	--	--
	Net Total Return	SPSFN	--	--	--

## Index Data

Daily constituent and index level data are available via subscription.

For product information, please contact S&P Dow Jones Indices, [www.spdji.com/contact-us](http://www.spdji.com/contact-us).

## Web site

For further information, please refer to S&P Dow Jones Indices' Web site at [www.spdji.com](http://www.spdji.com).

# Appendix I

## S&P Frontier BMI History

Milestone	Effective Date
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 reached a milestone with the seven-day calculation of the S&P GCC Indices. 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
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 2009
Zambia and Cyprus joined the Frontier series.	December 2009 and March 2010, respectively.
The United Arab Emirates and Qatar were both removed from the Frontier series and moved into the Emerging Series.	September 22, 2014
Morocco was moved 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



# Appendix II

## S&P Pan Africa ex South Africa Select Regions

Region Location	Region	Country of Listing
Africa	East Africa	Kenya
	North Africa	Egypt
		Morocco
		Tunisia
	Southern Africa ex-South Africa	Botswana
		Mauritius
		Namibia
		Zambia
		Zimbabwe
	West Africa	Cote d'Ivoire
		Ghana
Nigeria		

## S&P Sub Saharan Africa ex South Africa Select Regions

Region Location	Region	Country of Listing
Africa	East Africa	Kenya
	Southern Africa ex-South Africa	Botswana
		Mauritius
		Namibia
		Zambia
		Zimbabwe
	West Africa	Cote d'Ivoire
		Ghana
		Nigeria

# Appendix III

## Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
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 Nigeria Select Constituent Selection Buffer	07/29/2016	--	Current constituents with float-adjusted market capitalizations of at least US\$ 180 million remain eligible for index inclusion.
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.

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