

**S&P Dow Jones  
Indices**

A Division of **S&P Global**

# **S&P Real Assets Index Series** *Methodology*

November 2017

# Table of Contents

Introduction	2
<b>Highlights</b>	<b>2</b>
<b>Index Family</b>	<b>2</b>
Eligibility Criteria	3
<b>Index Eligibility</b>	<b>3</b>
<b>Timing of Changes</b>	<b>3</b>
Index Construction	4
<b>Approaches</b>	<b>4</b>
<b>Index Calculations</b>	<b>4</b>
Index Maintenance	5
<b>Rebalancing</b>	<b>5</b>
<b>Base Date and History Availability</b>	<b>5</b>
Index Governance	6
<b>Index Committee</b>	<b>6</b>
Index Policy	7
<b>Announcements</b>	<b>7</b>
<b>Holiday Schedule</b>	<b>7</b>
<b>Rebalancing</b>	<b>7</b>
<b>Unexpected Exchange Closures</b>	<b>7</b>
<b>Recalculation Policy</b>	<b>7</b>
<b>Contact Information</b>	<b>7</b>
Index Dissemination	8
<b>Tickers</b>	<b>8</b>
<b>FTP</b>	<b>8</b>
<b>Web site</b>	<b>8</b>
Appendix – Additional Index Compositions	9
<b>S&amp;P Real Assets Ex-DJCI Index</b>	<b>9</b>
<b>S&amp;P Real Assets Equity Index</b>	<b>9</b>
<b>S&amp;P Real Assets Bond Index</b>	<b>9</b>
<b>S&amp;P Real Assets Corporate Bond Index</b>	<b>10</b>
<b>S&amp;P Real Assets Investment Grade Corporate Bond Index</b>	<b>10</b>
<b>S&amp;P Real Assets High Yield Corporate Bond Index</b>	<b>10</b>
Disclaimer	11
S&P Dow Jones Indices: S&P Real Assets Index Series Methodology	1

# Introduction

The S&P Real Assets Index Series is designed to measure the performance of real return strategies that invest in a diverse array of financial assets or assets whose value is derived from physical underlying assets. As investments in physical assets may not be feasible or replicable, each S&P Real Assets Index consists of liquid, investable component indices that represent various asset classes, which traditionally have displayed similar characteristics as physical assets on a standalone basis as well as in a portfolio context. Those characteristics include, but are not limited to, inflation protection, diversification and yield stability.

Asset classes included in the S&P Real Assets Index Series include:

- Equity and corporate bonds of global property, natural resources and infrastructure companies
- Commodity futures
- Developed sovereign inflation-linked bonds
- Timber and forest companies

This methodology was created by S&P Dow Jones Indices and Brookfield Asset Management 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 the Index Committee so that the index continues to achieve its objective.

## Highlights

The S&P Real Assets Index Series is a set of multi-asset index of indices. The indices are rebalanced semi-annually, effective after the close of trading on the last business day of April and October. As part of the rebalancing process, the underlying component indices are reweighted.

## Index Family

The S&P Real Asset Index Series consists of the S&P Real Assets Index as well as indices based on different combinations of individual asset class component sub-indices. For more information on the composition of the other indices making up the index series, please refer to the *Appendix*.

# Eligibility Criteria

## Index Eligibility

The S&P Real Assets Index Series consists of indices composed of the following component indices:

Asset Class	Sub Asset Class	Component Index <sup>1</sup>
Equities	Global Property	Dow Jones Global Select Real Estate Securities Index
	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index
	Global Natural Resources	S&P Global LargeMidCap Commodity and Resources Index
	Global Timber and Forestry	S&P Global Timber & Forestry Index
Commodities	Commodities Futures	Dow Jones Commodity Index
Fixed Income	Global Infrastructure Corporate Bonds	Dow Jones Brookfield Global Infrastructure Broad Market Corporate Bond Index <sup>2</sup>
	Global Property Corporate Bonds	Dow Jones Global Select Real Estate Securities Corporate Bond Index <sup>2</sup>
	Global Natural Resources Corporate Bonds	S&P Global LargeMidCap Commodity and Resources Corporate Bond Index <sup>2</sup>
	Global Inflation-Linked Bonds	S&P Global Developed Sovereign Inflation-Linked Bond (USD) Index

For information on the eligibility criteria and index management rules of the component indices, please refer to each index's methodology document available at [www.spdji.com](http://www.spdji.com).

## Timing of Changes

The indices are rebalanced semi-annually, effective after the close of trading on the last business day of April and October.

<sup>1</sup> The following component index versions are used in the calculation of the S&P Real Assets Index Series:

- For total return indices, the component indices used in index calculation are all total return versions.
- For net total return indices, the component indices used in index calculation are as follows:
  - Equity component indices – net total return versions
  - Commodities and fixed income component indices – total return versions

<sup>2</sup> For the S&P Real Assets Investment Grade and High Yield Corporate Bond Indices, Investment Grade and High Yield sub-indices are used, respectively, as the component indices for index calculation. For further details on index composition, please refer to the *Appendix*.

# Index Construction

## Approaches

The indices are weighted based on static weighting allocations and are rebalanced semi-annually after the close of trading on the last business day of the rebalancing month.

**S&P Real Assets Index.** Index composition and static weighting allocations are outlined in the table below.

Asset Class	Sub Asset Class	Component Index	Index Weight
Equity	Global Property	Dow Jones Global Select Real Estate Securities Index	20%
	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	20%
	Global Natural Resources	S&P Global LargeMidCap Commodity and Resources Index	7.5%
	Global Timber and Forestry	S&P Global Timber & Forestry Index	2.5%
<i>Total Equity</i>			<i>50.00%</i>
Commodities	Commodities Futures	Dow Jones Commodity Index	10%
Fixed Income	Global Infrastructure Corporate Bonds	Dow Jones Brookfield Global Infrastructure Broad Market Corporate Bond Index	15%
	Global Property Corporate Bonds	Dow Jones Global Select Real Estate Securities Corporate Bond Index	5%
	Global Natural Resources Corporate Bonds	S&P Global LargeMidCap Commodity and Resources Corporate Bond Index	15%
	Global Inflation-Linked Bonds	S&P Global Developed Sovereign Inflation-Linked Bond (USD) Index	5%
<i>Total Fixed Income</i>			<i>40.00%</i>
<b>Total Weight</b>			<b>100%</b>

**Other Indices in the Index Series.** Index composition and static weighting allocations for the other indices making up the S&P Real Assets Index Series are outlined in the *Appendix*.

## Index Calculations

On any trading date,  $t$ , each index is calculated as follows using the component indices as detailed above or in the *Appendix*:

$$Index_t = Index_{PB} * (1 + IndexReturn_t) \quad (1)$$

$$IndexReturn_t = \sum_{i=1}^n w_i R_i \quad (2)$$

where:

$Index_{PB}$  = Index value on the previous rebalancing date.

$w_i$  = Weight of an asset class  $i$ .

$R_i$  = Cumulative return of the representative asset class  $i$  at  $t$  from the previous rebalancing date.

*For more information on the index calculation methodology, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.*

# Index Maintenance

## Rebalancing

The indices are rebalanced semi-annually, effective after the close of trading on the last business day of April and October. The pro-forma weights are provided five business days in advance of the rebalancing date and contain the component indices and their corresponding weights effective for the upcoming rebalancing.

## Base Date and History Availability

Index history availability, base dates and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P Real Assets Index	12/31/2015	04/29/2005	04/29/2005	1000
S&P Real Assets Ex-DJCI Index	12/31/2015	04/29/2005	04/29/2005	1000
S&P Real Assets Equity Index	03/18/2016	04/29/2005	04/29/2005	1000
S&P Real Assets Bond Index	03/18/2016	04/29/2005	04/29/2005	1000
S&P Real Assets Corporate Bond Index	03/18/2016	04/29/2005	04/29/2005	1000
S&P Real Assets Investment Grade Corporate Bond Index	03/18/2016	04/29/2005	04/29/2005	1000
S&P Real Assets High Yield Corporate Bond Index	03/18/2016	04/29/2005	04/29/2005	1000

# Index Governance

## **Index Committee**

The Global Benchmarks Index Committee maintains the indices. All Committee members are full-time professional members of S&P Dow Jones Indices' staff. The Committee meets monthly.

The Committee may revise index policy covering rules for including other assets or asset classes, changes to target weight allocations, currencies, the timing of rebalancing, 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.

*For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, [www.spdji.com](http://www.spdji.com).*

# Index Policy

## **Announcements**

Rebalancing announcements are made five days prior to the rebalancing date.

## **Holiday Schedule**

The indices are calculated daily, throughout the calendar year. The only days the indices are not calculated are on days when all exchanges where the underlying constituents of the component indices are listed are officially closed.

*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 located on our Web site, [www.spdji.com](http://www.spdji.com).

## **Recalculation Policy**

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document located on our Web site, [www.spdji.com](http://www.spdji.com).

*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 located on our Web site, [www.spdji.com](http://www.spdji.com).*

## **Contact Information**

For any 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

Index	Return Type	Bloomberg	Reuters
S&P Real Assets Index	Total Return Net Total Return	SPRAUT SPRAUN	.SPRAUT .SPRAUN
S&P Real Assets Ex-DJCI Index	Total Return Net Total Return	SPRAXDUT SPRAXDUN	.SPRAXDUT .SPRAXDUN
S&P Real Assets Equity Index	Total Return Net Total Return	SPRAET SPRAEN	-- --
S&P Real Assets Bond Index	Total Return	SPRABU	--
S&P Real Assets Corporate Bond Index	Total Return	SPRACU	--
S&P Real Assets Investment Grade Corporate Bond Index	Total Return	SPRAIGU	--
S&P Real Assets High Yield Corporate Bond Index	Total Return	SPRAHYU	--

## FTP

Daily index levels and index data are available via FTP 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 – Additional Index Compositions

Index composition and static weighting allocations for the other indices making up the S&P Real Assets Index Series are outlined in the following tables.

### S&P Real Assets Ex-DJCI Index

Asset Class	Sub Asset Class	Component Index	Index Weight
Equity	Global Property	Dow Jones Global Select Real Estate Securities Index	25%
	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	25%
	Global Natural Resources	S&P Global LargeMidCap Commodity and Resources Index	7.5%
	Global Timber and Forestry	S&P Global Timber & Forestry Index	2.5%
<i>Total Equity</i>			<b>60.00%</b>
Commodities	Commodities Futures	Dow Jones Commodity Index	-
Fixed Income	Global Infrastructure Corporate Bonds	Dow Jones Brookfield Global Infrastructure Broad Market Corporate Bond Index	15%
	Global Property Corporate Bonds	Dow Jones Global Select Real Estate Securities Corporate Bond Index	5%
	Global Natural Resources Corporate Bonds	S&P Global LargeMidCap Commodity and Resources Corporate Bond Index	15%
	Global Inflation-Linked Bonds	S&P Global Developed Sovereign Inflation-Linked Bond (USD) Index	5%
<i>Total Fixed Income</i>			<b>40.00%</b>
<b>Total Weight</b>			<b>100%</b>

### S&P Real Assets Equity Index

Asset Class	Sub Asset Class	Component Index	Index Weight
Equity	Global Property	Dow Jones Global Select Real Estate Securities Index	40%
	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	40%
	Global Natural Resources	S&P Global LargeMidCap Commodity and Resources Index	15%
	Global Timber and Forestry	S&P Global Timber & Forestry Index	5%
<b>Total Weight</b>			<b>100%</b>

### S&P Real Assets Bond Index

Asset Class	Sub Asset Class	Component Index	Index Weight
Fixed Income	Global Infrastructure Corporate Bonds	Dow Jones Brookfield Global Infrastructure Broad Market Corporate Bond Index	35%
	Global Property Corporate Bonds	Dow Jones Global Select Real Estate Securities Corporate Bond Index	15%
	Global Natural Resources Corporate Bonds	S&P Global LargeMidCap Commodity and Resources Corporate Bond Index	35%
	Global Inflation-Linked Bonds	S&P Global Developed Sovereign Inflation-Linked Bond (USD) Index	15%
<b>Total Weight</b>			<b>100%</b>

### S&P Real Assets Corporate Bond Index

Asset Class	Sub Asset Class	Component Index	Index Weight
Fixed Income	Global Infrastructure Corporate Bonds	Dow Jones Brookfield Global Infrastructure Broad Market Corporate Bond Index	40%
	Global Property Corporate Bonds	Dow Jones Global Select Real Estate Securities Corporate Bond Index	20%
	Global Natural Resources Corporate Bonds	S&P Global LargeMidCap Commodity and Resources Corporate Bond Index	40%
<b>Total Weight</b>			<b>100%</b>

### S&P Real Assets Investment Grade Corporate Bond Index

Asset Class	Sub Asset Class	Component Index	Index Weight
Fixed Income	Global Infrastructure Corporate Bonds	Dow Jones Brookfield Global Infrastructure Broad Market Corporate Bond Investment Grade Index	50%
	Global Property Corporate Bonds	Dow Jones Global Select Real Estate Securities Corporate Investment Grade Bond Index	10%
	Global Natural Resources Corporate Bonds	S&P Global LargeMidCap Commodity and Resources Corporate Investment Grade Bond Index	40%
<b>Total Weight</b>			<b>100%</b>

### S&P Real Assets High Yield Corporate Bond Index

Asset Class	Sub Asset Class	Component Index	Index Weight
Fixed Income	Global Infrastructure Corporate Bonds	Dow Jones Brookfield Global Infrastructure Broad Market Corporate Bond High Yield Index	50%
	Global Property Corporate Bonds	Dow Jones Global Select Real Estate Securities Corporate High Yield Bond Index	10%
	Global Natural Resources Corporate Bonds	S&P Global LargeMidCap Commodity and Resources Corporate High Yield Bond Index	40%
<b>Total Weight</b>			<b>100%</b>

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