

# **S&P Property Indices** *Methodology*

May 2020

# Table of Contents

Introduction	3
<b>Index Objective</b>	<b>3</b>
<b>Highlights</b>	<b>3</b>
<b>Index Family</b>	<b>3</b>
<b>Supporting Documents</b>	<b>4</b>
Eligibility Criteria	5
<b>Index Eligibility</b>	<b>5</b>
Index Construction	6
<b>S&amp;P Global Property &amp; REIT Indices</b>	<b>6</b>
<b>S&amp;P Global Property Shariah</b>	<b>10</b>
<b>S&amp;P Global Property 40 and S&amp;P Asia Property 40</b>	<b>11</b>
<b>Index Calculations</b>	<b>12</b>
Index Maintenance	13
<b>Rebalancing</b>	<b>13</b>
<b>Corporate Actions</b>	<b>13</b>
<b>Investable Weight Factor (IWF)</b>	<b>13</b>
<b>Currency of Calculation and Additional Index Return Series</b>	<b>14</b>
<b>Base Date and History Availability</b>	<b>14</b>
Index Data	15
<b>Calculation Return Types</b>	<b>15</b>
Index Governance	16
<b>Index Committee</b>	<b>16</b>
Index Policy	17
<b>Announcements</b>	<b>17</b>
<b>Pro-forma Files</b>	<b>17</b>
<b>Holiday Schedule</b>	<b>17</b>
<b>Rebalancing</b>	<b>17</b>
<b>Unexpected Market Closures</b>	<b>17</b>
<b>Recalculation Policy</b>	<b>17</b>
<b>Contact Information</b>	<b>17</b>

Index Dissemination	18
<b>Tickers</b>	<b>18</b>
<b>Index Data</b>	<b>19</b>
<b>Web site</b>	<b>19</b>
Appendix I	20
<b>Definition of Property Types</b>	<b>20</b>
Appendix II	21
<b>Methodology Changes</b>	<b>21</b>
Disclaimer	22

# Introduction

## Index Objective

The S&P Property Indices are float-adjusted market capitalization weighted indices that measure the performance of property and REIT stocks in selected markets.

## Highlights

The S&P Property Indices are comprised of an investable universe of publicly-traded property companies. Companies included in this index family are involved in a wide range of real estate-related activities, such as property management, development, rental, and investment. The REIT indices, in particular, include property trusts that invest in physical assets and other pass-through vehicles.

In addition to the global property benchmark indices, the family contains indices with narrower real estate themes, comprised of the larger, more liquid stocks for each relative index. The premier property benchmark is the S&P Global Property Index. This index also serves as the universe of all other property related indices, such as the S&P Global REIT, S&P Global Property 40 and S&P Asia Property 40 indices.

## Index Family

**S&P Global Property Index.** The index contains property companies trading in developed and emerging countries and is market-capitalization weighted, as are many of its sub-indices. All of the constituents are drawn from the S&P Global BMI.

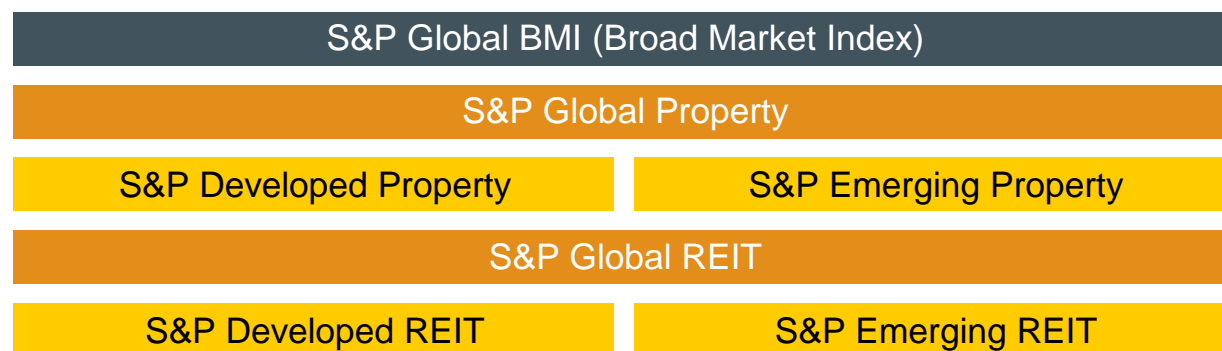
*For more information, please see the S&P Global BMI, S&P/IFCI Methodology on our Web site at [www.spdji.com](http://www.spdji.com).*

The S&P Global Property Index has sub-indices – the S&P Developed Property, the S&P Emerging Property, and the S&P Global REIT Indices. The S&P Global REIT Index is further broken down into Developed and Emerging Indices.

The following is a brief explanation of the major sub-indices included within the S&P Global Property Index:

- **S&P Developed Property Index.** The index represents the developed markets portion of the S&P Global Property Index.
- **S&P Emerging Property Index.** The index represents the emerging markets portion of the S&P Global Property Index.
- **S&P Global REIT Index.** The index consists of all real estate investment trusts in both developed and emerging markets.
- **S&P Developed REIT Index.** The index consists of all real estate investment trusts in developed markets, as defined by S&P Dow Jones Indices.
- **S&P Emerging REIT Index.** The index consists of all real estate investment trusts in emerging markets, as defined by S&P Dow Jones Indices.

The S&P Global BMI is the selection universe for the S&P Global Property Index and its sub-indices, as depicted in the visual below:



**S&P Global Property Shariah.** The index is part of the S&P Global Property index family. The index contains all publicly-traded property companies from the S&P Global Property Index that are Shariah compliant. The index is designed to offer investors an Islamic compliant version of the S&P Global Property Index. S&P Dow Jones Indices also offers a Shariah compliant version of the S&P Developed Property Index.

Similar to their parent indices, the S&P Global and Developed Property Shariah Indices are market-cap weighted indices.

**S&P Global Property 40.** The index consists of 40 companies taken from the S&P Global Property Index that meet more stringent size, liquidity and stability requirements. Constituents are weighted by float adjusted market capitalization, subject to single stock and basket liquidity constraints.

**S&P Asia Property 40.** The index consists of 40 Asian companies taken from the S&P Global Property Index that meet more stringent size, liquidity and stability requirements. Constituents are weighted by float adjusted market capitalization, subject to single stock and country capping constraints.

### 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>

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

## **Index Eligibility**

The S&P Global Broad Market Index (BMI) serves as the universe of stocks from which all of the S&P Property Indices constituents are drawn. The S&P Global Property index is drawn from BMI constituents specifically classified under the GICS Real Estate Sector. Index constituents derive more than 60% of their revenue from property or real estate–related activities. Specifically, more than 60% of their revenue must come from real estate development, management, rental, and/or investment, as well as companies that invest in physical assets, such as REITs and property trusts. Along with revenues, operating profit and market perception of the company are all elements that are considered in defining a property index constituent

# Index Construction

## S&P Global Property & REIT Indices

### Eligibility Factors

S&P Global Property Index constituents are drawn from the S&P Global BMI and are added to either the property or REIT sub-indices based on their GICS code. Companies added to the indices must be part of the Real Estate Sector.

All companies added to the S&P Global Property Index must meet the S&P Global BMI size and liquidity thresholds.

*For more information on GICS, please refer to the GICS Methodology and Map documents.*

### Inclusion and Exclusion Criteria

**S&P Global Property Index.** Below are specific industry criteria for company inclusion in the S&P Global Property Index. In particular, these companies must be engaged in real estate ownership, development and/or management.

- Lessors of buildings and dwellings
- Lessors of mini warehouses and self-storage units
- Real estate development
- Real estate property managers
- Real estate rental and leasing

The Property Index specifically **excludes** companies whose main source of revenue is derived from fees or interest earned when providing real estate services or financing.

- Brokers and investment management service companies
- Companies primarily engaged in the financing of real estate
- Companies solely engaged in the management of properties or facilities
- Homebuilders and companies in construction, contracting and project management services
- Real estate agents and appraisers

**S&P Global REIT Index.** The S&P Global Property Index serves as the universe of constituent candidates for the S&P Global REIT Index. In addition to the criteria mentioned above, these constituents must conform to the legal structures that define a real estate investment trust in the U.S., or similar guidelines in the country of their domicile. The REITs in the index are primarily companies that invest in buildings, which are human occupied or used for storage.

The REIT indices specifically **exclude** timber REITs, mortgage REITs, tower REITs, and mortgage-backed REITs.

To be eligible for a REIT classification, the company must meet one of the following listed legal structures. This list may expand as more countries adapt these structures.

- Australia: A-REITs (Australian Real Estate Investment Trust)

- Belgium: SICAFI (Société d'Investissement a Capital Fixe Immobilière) or B-REIT (Société Immobilière Réglementée/Gereguleerde VastgoedVennootschap)
- Canada: REIT (Real Estate Investment Trust)
- France: SIIC (Sociétés d'Investissements Immobiliers Cotees)
- Germany: REIT-AG (German Real Estate Investment Trust)
- Greece: REIC (Real Estate Investment Company)
- Hong Kong: REIT (Real Estate Investment Trust)<sup>1</sup>
- Israel: REIT (Real Estate Investment Trust)
- Italy: SIIQ (Società Di Investimento Immobiliare)
- Ireland: REIT (Real Estate Investment Trust)
- Japan: J-REIT (Japanese Real Estate Investment Trust)
- Malaysia: REIT (Real Estate Investment Trust/Property Trust Funds)
- Mexico: FIBRA (Fideicomisos de Infraestructuras y Bienes Raices)
- Netherlands: FBI (Fiscal investment institution/Fiscale Beleggingsinstelling)
- New Zealand: (Unit Trusts, Portfolio Investment Entities, Limited Partnerships)
- Saudi Arabia: REIT (Real Estate Investment Trust)<sup>2</sup>
- Singapore: S-REIT (Singapore Real Estate Investment Trust)
- South Africa: SA-REIT (South African Real Estate Investment Trust) or PUT (Property Unit Trust)
- South Korea: K-REITs, P-REITs or CR-REIT
- Spain: REIT (Real Estate Investment Trust)
- Taiwan: REIT (Real Estate Investment Trust)
- Thailand: REIT (Real Estate Investment Trust)
- Turkey: REIT (Real Estate Investment Trust - Gayrimenkul Yatirim Ortakligi)
- United Kingdom: REIT (Real Estate Investment Trust)
- United States: REIT (Real Estate Investment Trust)

Under special circumstances the Index Committee reserves the right to include and exclude constituents, which may not clearly conform to the guidelines set above.

### **Additions and Deletions**

**Additions.** The majority of additions and deletions occur as part of the annual reconstitution of the indices. Since these indices do not have a fixed number of constituents, additions and deletions are not linked to one-another.

### **Initial Public Offerings**

IPO additions to the index take place quarterly. The criteria for inclusion of an IPO will be the same as that used at the annual reconstitution of the S&P Global BMI. The reference date for IPO inclusions will be five weeks prior to the effective rebalancing date, and additions are effective at the open of Monday following the third Friday of March, June, September and December.

For information on the immediate inclusion or "fast-track" of significantly sized IPOs, please refer to the *S&P Global BMI, S&P/IFCI Methodology* available at [www.spdji.com](http://www.spdji.com).

<sup>1</sup> Chinese properties in the form of Real Estate Investment Trusts (REIT) listed in Hong Kong are considered domiciled in Hong Kong given that China does not have REIT legislation at this time.

<sup>2</sup> Saudi Arabian properties in the form of Real Estate Investment Trusts (REIT) can denominate themselves as closed-ended despite trading in public exchanges.



### Spin-Offs

Property company spin-offs from index constituents are eligible for index inclusion and are included in the index on their ex-dates.

If a company, which is not in the index, spins off a property or REIT business, the spun-off company is treated as an IPO for initial add consideration. Otherwise, the spun-off issue is reviewed at the next annual reconstitution.

### Industry Reclassifications

Industry reclassifications may result in BMI constituents being added to or deleted from the S&P Property/REIT indices following a minimum five-day notice period, typically at the quarterly share rebalancing or at month end, whichever happens sooner.

**Deletions.** Companies may be removed from the indices for the following reasons:

- Any constituent removed from the S&P Global BMI Index will be removed from the S&P Global Property Index simultaneously.
- Delisting due to merger, acquisition, takeover or bankruptcy
- Industry reclassification out of the GICS Real Estate Sector

Companies reclassified out of the GICS *Real Estate* Sector or out of the GICS *Real Estate Investment Trust* Industry are deleted from the S&P Property index and/or the S&P REIT Index, respectively. Deletions due to industry reclassifications of non-REIT companies become effective on the first of the month following a five-day notice period. REIT companies may be deleted sooner, also following a five-day notice period.

### Bankruptcies & Stock Suspensions

Please refer to the Bankruptcies and Stock suspensions section of the *S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology* for more information on the treatment of bankrupt and suspended securities.

### Timing of Changes

All changes are preceded by a five-day notice period, unless noted otherwise.

#### **Additions**

- IPOs – Added at the quarterly share rebalancing
- Spin-offs from property companies – Added on the ex-date
- Spin-offs from non-property companies – Added at the quarterly share rebalancing
- Reclassifications into property – Added at month end
- Reclassifications into REIT – Added at month end

#### **Deletions**

- Delisting due to merger, acquisition, takeover or bankruptcy – Any time following a five-day notice. Bankruptcy or delisting after-the-fact has a one-day notice period.
- Reclassifications out of the GICS Real Estate Sector – Property companies at month-end, REIT companies immediately following a five-day notice period.

**Peer Group Classification.** As mentioned above, all BMI companies classified under the GICS *Real Estate* Sector are eligible for index inclusion. In addition to the GICS classification, property index constituents are further classified to identify specific property types. This classification consists of 9 different property peer groups listed below.

For definitions of these classifications, please refer to Appendix I.

S&P Global Property/REIT Peer Groups	S&P Property Type Codes – Equity	S&P REIT Type Codes – Equity
Diversified	E01	E01R
Hotel/Resort & Entertainment	E02	E02R
Industrial Property	E03	E03R
Office Space	E04	E04R
Healthcare Property	E05	E05R
Retail Property	E06	E06R
Storage Property	E08	E08R
Specialty	E09	E09R
Residential	E10	E10R

**Regional, Country and Peer Group Divisions.** Within the S&P Global Property family, Property and REIT indices are available at world, regional, country and peer group levels. By special request, investors can create new regional indices or alter standard ones to match investment strategies. S&P Dow Jones Indices headline indices include:

Property Regional Indices	REIT Regional Indices
S&P Global Property	S&P Global REIT
S&P Europe Property	S&P Developed REIT
S&P Eurozone Property	S&P Europe REIT
S&P EPAC Property	S&P North America REIT
S&P Developed Ex-Japan Property	S&P Asia Pacific REIT
S&P Developed Ex-US Property	S&P Developed Ex-Japan REIT
S&P Developed Property Peer Groups	S&P Developed REIT Peer Groups

## S&P Global Property Shariah

### Eligibility Criteria

The S&P Global Property Shariah adheres to the same eligibility criteria as its parent index, the S&P Global Property index. The additional eligibility condition for this index is Shariah compliance.

For more information on Shariah eligibility, please refer to the *S&P Shariah Indices Methodology* available on our Web site, [www.spdji.com](http://www.spdji.com).

### Timing of Changes

The index is reviewed monthly for any potential Shariah compliant changes. Removals due to failure to comply with Shariah law become effective after the close of business of the third Friday of each month. Removals due to corporate events are effective with five business days' notice.

In addition, the index undergoes a full rebalancing on the third Friday of September to coincide with the annual reconstitution of the S&P Global Property Index.

Companies in the S&P Global Property Index meeting Shariah eligibility rules may be added to the index the third Friday of the following month.

### Index Construction

The construction of the S&P Global Property Shariah begins with the S&P Global Property Index, which serves as its selection Universe. The same rules governing the parent index apply to the S&P Global Property Shariah with the added Shariah compliance criterion. The index uses a float-adjusted market capitalization weighting scheme in its index calculation.

**Regional and Country Divisions.** The S&P Global Property Shariah indices are available at regional and country levels, in both U.S. dollars and euros. By special request, investors can create new regional indices or alter standard ones to match investment strategies. S&P Property Shariah headline indices include:

Property Regional Indices	
S&P Asia Pacific Property Shariah	S&P Global Property Shariah
S&P Developed Property Shariah	S&P North America Property Shariah
S&P Europe Property Shariah	S&P United States Property Shariah

## S&P Global Property 40 and S&P Asia Property 40

### Eligibility Criteria

The **S&P Global Property 40** meets stricter market capitalization and liquidity requirements than are needed for the S&P Global Property Index.

- **Market Capitalization.** Constituents must have at least US\$ 1 billion in total market capitalization as of the semi-annual rebalancing reference dates.
- **Liquidity.** Constituents must have a minimum three month average daily value traded (ADVT) of US\$ 3 million as of the semi-annual rebalancing reference dates.
- **Domicile.** Constituents must trade on developed markets.
- **Earnings Stability.** Constituents must have non-negative earnings in the last fiscal year.
- **Dividend Stability.** Constituents must have paid dividends in the last fiscal year.

The **S&P Asia Property 40** meets stricter market capitalization and liquidity requirements than are needed for the S&P Global Property Index.

- **Market Capitalization.** Constituents must have at least US\$ 1 billion in total market capitalization as of the annual rebalancing reference date.
- **Liquidity.** Constituents must have a minimum three month ADVT of US\$ 3 million as of the annual rebalancing reference date.
- **Domicile.** Constituents in the S&P Asia Property 40 Index must be domiciled in an Asian country and each stock's primary listing must be in an Asian market. To ensure tradability, local Indian listing and both Chinese A and B shares are currently ineligible for the index.

### Constituent Selection

The selection of index constituents is done as follows:

#### Universe Selection

- **S&P Global Property 40** – Stocks in the S&P Global Property Index that meet the thresholds and domicile criteria as outlined above in *Eligibility Criteria* are, then, classified as being in one of the four S&P Dow Jones Indices North America, Europe, Asia and Mid-East Africa Developed regions.
- **S&P Asia Property 40** – Stocks in the S&P Global Property Index that meet the thresholds and domicile criteria as outlined above in *Eligibility Criteria* are, then, classified according to country of domicile (China and Hong Kong are treated as separate countries).

#### Final Constituent Selection

- **S&P Global Property 40** – Constituent selection is as follows:
  1. Companies in the selection universe are ranked based on float-adjusted market capitalization.
  2. Companies are selected top-down by final rank until the target constituent count of 40 is reached, such that no more than 20 and no fewer than 5 stocks are selected from any one region. If at any point during the selection process a region reaches 20 selected constituents, the remaining companies from that region are removed from the rankings. Selection is subject to the following buffers:
    - The top 35 companies are selected for the index, regardless of whether they are current constituents.

- Current constituents ranked among the top 45 are selected top-down until the target constituent count is reached.
  - If the number of selected companies is still less than 40, current non-constituents are selected top-down until the target constituent count is reached.
  - If, after the selection steps are completed, any region has fewer than five companies selected, the region is removed from the eligible universe, companies are re-ranked, and the selection steps are repeated utilizing the new rankings.
- **S&P Asia Property 40** – Constituent selection is as follows:
    1. Companies in the selection universe are ranked based on float-adjusted market capitalization.
    2. Companies are selected top-down by final rank until the target constituent count of 40 is reached, such that no more than 15 stocks are selected from any one country, subject to the following buffers:
      - The top 35 companies are selected for the index, regardless of whether they are current constituents.
      - Current constituents ranked among top 45 are selected top-down until the target constituent count is reached.
      - If the number of selected companies is still less than 40, current non-constituents are selected top-down until the target constituent count is reached.

## Constituent Weightings

At each index's rebalancing, constituents are weighted according to the following constraints:

Index	Stock Weight	Country Weight	Other Criteria
	<i>Max</i>	<i>No Greater Than</i>	
S&P Global Property 40	10%	--	The minimum initial portfolio size that can be turned over in a single day (based on three-month average value traded) cannot be lower than US\$ 400 million.
S&P Asia Property 40	10%	40%	--

## Timing of Changes

The S&P Property 40 family of indices is fully rebalanced annually or semi-annually. Please refer to *Index Maintenance* for details on the rebalancing schedule.

**Additions.** No additions are made to the indices between rebalancings, except for spin-offs.

**Deletions.** Index constituents may be deleted from their indices during their respective rebalancings if any fail eligibility criteria. Index constituents are removed from their corresponding index between rebalancings, if the stock undergoes a corporate event such as a merger, acquisition, takeover or delisting. Deletions are announced as soon as practical and are made effective with a minimum of a two-day notice.

## Index Calculations

The indices are calculated by means of the divisor methodology used in all S&P Dow Jones Indices equity indices.

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

# Index Maintenance

## Rebalancing

The S&P Global BMI index reconstitution involves both a bottom-up and a top-down review of all aspects of index construction.

**S&P Global Property Index.** The S&P Global Property Index, along with all of its sub-indices, is fully reconstituted each September using end-of-July data and becomes effective at the close of the 3<sup>rd</sup> Friday of September.

**S&P Global Property Shariah.** The S&P Global Property Shariah follows the same reconstitution schedule as that of its parent, the S&P Global Property Index. In addition, constituents of the universe are reviewed for Shariah compliance at the beginning of each month. Changes that result in additions and/or deletions are implemented the third Friday of each month.

**S&P Global Property 40.** The S&P Global Property 40 rebalances semi-annually, effective after the close of trading on the third Fridays of May and November. The rebalancing reference dates are after the close of trading on the third Fridays of April and October, respectively. The price reference date for stock weighting is the Wednesday prior to the second Friday of May and November.

**S&P Asia Property 40.** The S&P Asia Property 40 rebalances annually, effective after the close of trading on the third Friday of November. The rebalancing reference date is after the close of trading on the third Friday of October. The price reference date for stock weighting is the Wednesday prior to the second Friday of November.

## Corporate Actions

**S&P Global Property and S&P Global Property Shariah Indices.** The S&P Global Property Index (and its sub-indices) are market-cap weighted indices. 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. Please refer to *S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology* for specific information regarding treatment for these, and all other, corporate actions for market-cap weighted indices.

**S&P Global Property 40 and S&P Asia Property 40.** These indices follow a non-market capitalization weighted methodology. This means that some corporate actions are applied differently than for the S&P Global Property and BMI indices. Please refer to *S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology* for specific information regarding treatment for these, and all other, corporate actions for non-market capitalization weighted index.

## Investable Weight Factor (IWF)

All constituents of the S&P Property Indices 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).*

## Currency of Calculation and Additional Index Return Series

All of the indices in the S&P Property Indices family are calculated daily. Price return, total return, and net return versions are available in the following currencies:

- S&P Global Property Index: Australian dollars, Canadian dollars, euros, British pounds, Japanese yen, and U.S. dollars.
- S&P Global Property 40: U.S. dollars and euros.
- S&P Asia Property 40: U.S. dollars and euros.

WM/Reuters foreign exchange rates are taken daily at 4:00 PM London Time and used in the calculation of the S&P Global Equity and S&P Property Indices. These mid-market fixings are calculated by the WM Company based on Reuters' data and appear on Reuters' page WMRA.

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

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

## 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 Global Property	12/31/1992	01/01/1995	12/31/1997	100
S&P Developed Property	12/31/1992	07/01/1989	12/31/1992	100
S&P Emerging Property	12/31/1997	01/01/1995	12/31/1997	100
S&P Global REIT	12/31/1992	07/01/1989*	12/31/1997	100
S&P Developed REIT	12/31/1992	07/01/1989	12/31/1992	100
S&P Global Property 40	01/24/2007	11/16/2001	11/16/2001	1000
S&P Asia Property 40	06/23/2008	10/18/2002	10/18/2002	1000

\* For the S&P Global REIT, data prior to January 1, 1995 consists of developed REIT country data only.

# 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

The S&P Property indices are maintained by an Index Committee. 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 advance via the Index Corporate Events report (.SDE), delivered daily to all clients. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

## Pro-forma Files

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

*Please visit [www.spdji.com](http://www.spdji.com) for a complete schedule of rebalancing timelines and pro-forma delivery times.*

## Holiday Schedule

The S&P Global Property and S&P Global REIT indices are calculated daily, throughout the calendar year. The only days the indices are not calculated or files are not distributed are on days when all exchanges where an index's constituents are listed are officially closed. All other indices are calculated daily on all business days of the year, throughout the calendar year.

*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 Market 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](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 versions of the below indices that may exist are also covered by this document. Please refer to [S&P DJI's All Indices by Methodology Report](#) for a complete list of indices covered by this document.

Index (Currency)	Return Type	Bloomberg	Reuters
S&P Asia Pacific Property (USD)	Price Return Total Return	SPBMAPU SPBMAPUT	.SPCBMIRAPPR
S&P Developed Property (USD)	Price Return Total Return Net Total Return	SPBMWDU SPBMWDUT SPBMWDUN	.SPCBMIRWDPR
S&P Developed Ex-U.S. Property (USD)	Price Return Total Return	SPBMWUU SPBMWUUT	.SPCWPXUU
S&P EPAC Property (USD)	Price Return	SPBMEPU	.SPCBMIREPPR
S&P Europe Property (USD)	Price Return Total Return	SPBMEUU SPBMEUUT	.SPCBMIREUPR
S&P Eurozone Property (USD)	Price Return	SPBMEZU	.SPCBMIREZPR
S&P Global Property (USD)	Price Return Total Return	SPBMGPPU SPBMGPTU	.SPCBMIRGLPR
S&P Global Ex-U.S. Property (USD)	Price Return	SPBMGUU	
S&P United States Property (USD)	Price Return	SPBCUSU	
S&P North America Property (USD)	Price Return	SPBMNAU	.SPCBMIRNAPR
S&P Developed REIT (USD)	Price Return Total Return	SREIT SREITTR	
S&P Developed REIT (JPY)	Price Return Total Return	SREITJ SREITTRJ	.SPCBMIRWDRE
S&P Developed Ex-U.S. REIT (USD)	Price Return Total Return	SREITWU SREITTWU	
S&P Emerging REIT (USD)	Price Return Total Return Net Total Return	SREIEMUP SREIEMUT SREIEMUN	
S&P Europe REIT (USD)	Price Return Total Return	SREIEUU SREIEUUT	
S&P Global REIT (USD)	Price Return Total Return	SREITGL SREITTGL	.SPCMBMIRGLRE
S&P Global Ex-Japan REIT (USD)	Price Return		.SPCBMIRWJRE
S&P United States REIT (USD)	Price Return	STCGUSRE	.SPCBMICUSRE
S&P Asia Property 40 (USD)	Price Return Total Return Net Total Return	SPP4ADP SPP4ADPT SPP4ADPN	.SPP4ADP
S&P Asia Property 40 (EUR)	Price Return Total Return Net Total Return	SPP4AEP SPP4AET SPP4AEN	.SPP4AE
S&P Global Property 40 (USD)	Price Return Total Return Net Total Return	SPP4GDP SPP4GDT	.SPP4GDP .SPP4GDT .SPP4GET
S&P Global Property 40 (EUR)	Price Return Total Return	SPP4GEP SPP4GET	

**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

## Definition of Property Types

Below is a brief description of each property peer group classification.

- Diversified property companies, focus on more than one of the major activities enumerated below. Typically, if the revenue from one kind of activity is less than 60% of the total and the remaining property focus accounts for the rest, the company is deemed diversified.
- Hotel/Resort and Leisure property companies own, acquire, develop, lease, manage and operate hotels, resorts and other entertainment facilities such as amusement parks.
- Industrial property companies own, acquire, develop, lease, manage and operate a diverse set of industrial facilities such as warehousing facilities, distribution and manufacturing bases.
- Office Space property companies own, acquire, develop, lease, manage and operate office buildings. These can be based in business districts, in suburbs, and could be multi-tenant vs. single tenant facilities.
- Healthcare property companies own, acquire, develop, lease, manage and operate healthcare facilities like nursing homes, assisted living facilities, hospitals, psychiatric facilities and medical office buildings.
- Retail property companies own, acquire, develop, lease, manage and operate shopping malls, outlet malls, and neighborhood and community shopping centers.
- Storage property companies own, acquire, develop, lease, manage and operate self-storage facilities. These could be equipped with advanced security systems and climate controlled units.
- Specialty property companies own, acquire, develop, lease, manage and operate a range of specialized activities not classified elsewhere. Includes companies that operate and invests in correctional and restaurant facilities. Since each of these activities is highly specialized in nature they have been dubbed specialty property companies.
- Residential property companies own, acquire, develop, lease, manage and operate residential properties including multifamily homes, apartments, manufactured homes and housing properties for the purpose of rentals.

# Appendix II

## Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
Inclusion of Saudi Arabia in the S&P Global Property and S&P Global REIT Indices	03/15/2019	--	Saudi Arabia was initially a stand-alone market. In March 2019, it was promoted to emerging market status. Eligible stocks are included using a specified float-adjusted market capitalization percentage of 50% in March 2019 and 100% beginning in September 2019.
S&P Global Property 40 and S&P Asia Property 40  Final Constituent Selection Buffer Rule	04/29/2016	Subject to the geographical diversification criteria, all of the three indices above allow for a five-stock buffer. Therefore, index constituents that fall among the top 45 stocks based on float-adjusted market capitalization remain in the index.	Subject to the geographical diversification criteria, all of the three indices above allow for a five-stock buffer. Therefore, index constituents that fall among the top 45 stocks based on float-adjusted market capitalization remain in the index and non-constituents that fall among the top 35 stocks based on float-adjusted market capitalization are added to the index.
S&P Global Property Shariah Index:  Treatment of Spin-offs	09/30/2015	Spin-offs are reviewed for Shariah compliance as soon as possible with any available information. If the company meets all eligibility rules, including industry criterion <u>and</u> is deemed to be Shariah compliant then the company is added to the index. If, however, the Shariah Board is unable to determine that the new company is Shariah compliant, the company is not added to the index. The company may be added at the next monthly review when it meets all eligibility rules including Shariah compliance.	Spin-offs are added at a zero price at the market close of the day before the ex-date (with no divisor adjustment) and are removed after at least one day of regular way trading (with a divisor adjustment), regardless of Shariah compliance.

# Disclaimer

Copyright © 2020 S&P Dow Jones Indices LLC. All rights reserved. STANDARD & POOR'S, S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, S&P 100, S&P COMPOSITE 1500, S&P MIDCAP 400, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, S&P TARGET DATE INDICES, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"). DOW JONES, DJ, DJIA and DOW JONES INDUSTRIAL AVERAGE are registered 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 Dow Jones Indices LLC, S&P, S&P Trucost Limited, SAM (a part of S&P Global), Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices 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 Dow Jones Indices 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 Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices 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. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment 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 Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices 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" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM 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.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order 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 non-public 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.

The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a trademark of S&P and MSCI. Neither MSCI, S&P 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, 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.