

# **S&P Target Tuition Inflation Index** *Methodology*

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# Introduction

## Index Objective and Highlights

The S&P Target Tuition Inflation Index is comprised of underlying equity and bond indices designed to model changes in college tuition and fees over long-term periods. For shorter-term periods, this index may not be indicative of changes in college tuition and fees. The index may experience periods of negative returns based on the performance of the underlying constituents, whereas the cost of tuition and fees generally does not decline.

## 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>

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 universe of eligible asset classes and the indices used to represent each are listed in the table below:

<b>Asset Class</b>	<b>Index</b>
Inflation-Linked Bonds	S&P U.S. Treasury TIPS 1-10 Year Index
	S&P U.S. Treasury TIPS 15+ Year Index
Corporate Bonds	S&P 500 Bond Index
Equities	S&P 500 (TR)

*For details on the eligible asset class indices, please refer to their respective index methodologies available at [www.spdji.com](http://www.spdji.com).*

## Timing of Changes

The index is rebalanced monthly after the close of the last business day of the month.

# Index Construction

## Index Constituents

The S&P Target Tuition Inflation Index consists of allocations to a group of indices covering U.S. inflation-linked treasury securities (TIPS), U.S. corporate bonds, and a short overlay of U.S. equities.

All the underlying indices are total return in USD. The following indices represent each of the underlying asset classes:

Asset Class	Benchmark Index	Index Code
Inflation-Linked Bonds	S&P U.S. Treasury TIPS 1-10 Year Index	SPBDU9Y
	S&P U.S. Treasury TIPS 15+ Year Index	SPBDUFP
Corporate Bonds	S&P 500 Bond Index	SP500BD
Equities	S&P 500 (TR)	500TR
Cash	S&P U.S. Treasury Bill 0-3 Month Index	SPBDUB3

For details on the benchmark indices, please refer to their respective index methodologies available at [www.spdji.com](http://www.spdji.com).

## Weights Allocation

At each rebalancing the weight of inflation-linked bonds is set at 80%, equally weighting the S&P U.S. Treasury TIPS 1-10 Year Index and S&P U.S. Treasury TIPS 15+ Year Index at 40% each.

The weights of the S&P 500 (TR), S&P 500 Bond Index, and Cash are determined on a monthly basis. The weight of the S&P 500 (TR) is derived via an interpolation based on the 3-year return of the S&P 500 (TR) as described below:

- (1) If the 3-year return of the S&P 500 (TR) is negative, the weight is interpolated between -5% (when the S&P 500 3-year return is at 0%) and -10% (when the S&P 500 3-year return is at -100%);
- (2) If the 3-year return of the S&P 500 (TR) is positive, but less than 50%, the weight is interpolated between 0% (when the S&P 500 3-year return is at 50%) and -5% (when the S&P 500 3-year return is at 0%).
- (3) If the 3-year return is positive, and greater than 50%, the weight is set at 0%.

The weights of the S&P 500 Bond Index are based on what the above determined Equity weight is, as follows:

- (1) If the weight of the S&P 500 (TR) is less than -5%, the weight is set at 25%.
- (2) If the weight of the S&P 500 (TR) is greater than or equal to -5%, the weight is set at 1 minus the sum of the weights of the Equity and Inflation-Linked Bond weights.

The weight of Cash is based on the weights of the above determined Equity weight, as follows:

- (1) If the weight of the S&P 500 (TR) is less than -5%, the weight is set at 1 minus the sum of the weights of the Equity, Bond and Inflation-Linked Bond weights.
- (2) If the weight of the S&P 500 (TR) is greater than or equal to -5%, the weight is set at 0%.

<b>Benchmark Index</b>	<b>Weight</b>
S&P U.S. Treasury TIPS 1-10 Year Index	40%
S&P U.S. Treasury TIPS 15+ Year Index	40%
S&P 500 Bond Index	Weight varies depending on the short position in equities.
S&P 500 (TR)	Short on equities and weight is reset monthly via interpolation according to 3-year return of S&P 500. The weight varies between -10% and 0%.
S&P U.S. Treasury Bill 0-3 Month Index	Weight varies depending on the short position in equities, and is between 0% and 5%.

# Index Maintenance

## Rebalancing

The index is rebalanced monthly. The rebalancing is effective after the close of the last business day of the month. The rebalancing reference date is the fifth business day before the last business day of the month.<sup>1</sup>

## Currency, Currency Hedged, and Risk Control Indices

The index is calculated in U.S. dollars.

Currency, currency hedged, and risk control versions of the 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.*

## Base Date and History Availability

Index history availability, base date and base value are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P Target Tuition Inflation Index	08/31/2017	12/31/2001	12/31/2001	100

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<sup>1</sup> For history prior to launch, both the rebalancing reference and effective dates were the last business day of the month.

# Index Data

## Index Levels

The index level is constructed by assigning the weights as detailed in *Index Construction* to the underlying indices at each monthly rebalancing:

$$IndexLevel_t = IndexLevel_{t-1} \times (1 + R_s)$$

where:

$R_s$  = The composite return of the index for period  $s$ , calculated as:

$$R_s = \sum_{i=1}^M w_{i,s} \times r_{i,s}$$

where:

$w_{i,s}$  = The weights of each of the underlying indices (i.e. S&P U.S. Treasury TIPS 1-10 Year Index, S&P U.S. Treasury TIPS 15+ Year Index, S&P 500 Bond Index and S&P 500 (TR)) and the cash component included in index for period  $s$ .

$r_{i,s}$  = The returns on each of the underlying indices since the last rebalancing.

The weights  $w_{i,s}$  are the effective weights of the underlying indices, rebalanced dynamically on a monthly basis.



# Index Governance

## **Index Committee**

The S&P Target Tuition Inflation Index is maintained by the Global Benchmarks Index Committee. All committee members are full-time professional members of S&P Dow Jones Indices' staff. The committee meets monthly. At each meeting, the Committee reviews matters that may affect index constituents, statistics comparing the composition of the indices to the market, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting constituents, 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**

Index data is evaluated daily. Any unusual treatment of a corporate action or short notice of an event may be communicated via email to clients.

Index methodology is constantly under review for best practices, and any changes are announced well ahead of time via the Web site and email to all clients.

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

## **Holiday Schedule**

The index is calculated daily Monday through Friday, excluding U.S. market holidays.

*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.

## **Unscheduled 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 located.*

## **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, 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	Bloomberg
S&P Target Tuition Inflation Index	SPTTIPUT

## FTP

Daily index level 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).*

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