

**S&P Dow Jones  
Indices**

A Division of **S&P Global**

# **S&P Multi-Asset Dynamic Inflation Strategy Index *Methodology***

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# Introduction

## Index Objective and Highlights

The S&P Multi-Asset Dynamic Inflation Strategy Index is a weighted return index that measures the performance of a dynamic rotational strategy across a series of component indices designed to potentially reflect a response to the prevailing inflation regime in the U.S., as measured by the official monthly U.S. CPI (YoY) for all Urban Consumers. The index switches between three multi-asset strategies that have historically performed well in either a low, medium, or high inflation regime.

Component indices included in the S&P Multi-Asset Dynamic Inflation Strategy Index include those representing:

- U.S. equities
- Commodity futures
- U.S. sovereign bonds
- U.S. inflation-linked bonds
- U.S. REITS

## 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' Fixed Income Policies & Practices Methodology	<a href="#">Fixed Income Policies &amp; Practices</a>
S&P Commodities Indices Policies & Practices Methodology	<a href="#">Commodities Policies &amp; Practices</a>
S&P Dow Jones Indices' Fixed Income Index Mathematics Methodology	<a href="#">Index Mathematics Methodology</a>

# Eligibility Criteria

## Index Eligibility

The following component indices are included:

Asset Class	Sub Asset Class	Component Index <sup>1</sup>
Equities	U.S. equities	S&P Composite 1500 (TR)
	U.S. real estate	S&P United States REIT (USD) TR
Commodities	Commodities futures	S&P GSCI (TR)
		S&P GSCI Gold (TR)
Fixed Income	U.S. sovereign bonds	S&P U.S. Aggregate Bond Index (TR)
	U.S. inflation-linked bonds	S&P U.S. TIPS Index (TR)

*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).*

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<sup>1</sup> The following component index versions are used in the calculation of the index:  
For total return indices, the component indices used in index calculation are all total return versions. For history prior to 04/30/2002, the S&P US Treasury Bond Current 10 Year Index (TR) was used in place of the S&P US Aggregate Bond Index (TR).

# Index Construction

## Approach

Based on a forecast of the inflation regime each month, the index switches between allocations that have historically performed well in various inflation regimes. This results in periodic changes to the asset allocation, potentially reflecting a response to the prevailing inflation regime.

## Inflation Forecast

Inflation rate is taken to be the year-over-year change (YoY) in CPI for all urban consumers before seasonal adjustment, using data released each month by the U.S. Bureau of Labor Statistics: <https://fred.stlouisfed.org/series/CPIAUCNS>. The current month's CPI (YoY) is used as a forecast of the following month's inflation.

## Strategy Selection

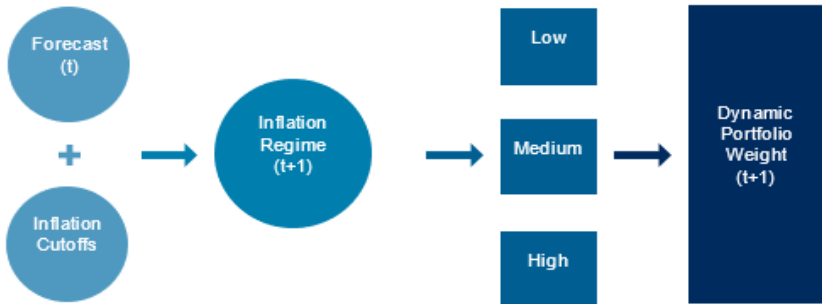
The inflation regime is identified based on cutoffs for specific levels of inflation, as illustrated in the table below. For each inflation regime, a suitable strategy is identified based on inflation sensitivity, historical performance, and economic justification.

Inflation Regime	CPI (YoY) Range	Strategy	Weight Allocation
Low	Below 1.5%	60/40	60% to U.S. equities, 40% to U.S. sovereign bonds
Medium	1.5% to 2.5%	VolWt	Inversely proportional to realized volatility
High	Above 2.5%	ProIB	Proportional to inflation beta

The "VolWt" strategy overweights component indices with historically lower volatilities, resulting in a more balanced risk contribution, ex-ante. The "ProIB" strategy allocates higher weight to asset classes that exhibit higher inflation sensitivity. Each strategy is constructed using rolling 10-year lookback windows. Given the limited data history for TIPS, a shorter lookback is used for the early years (1997 - 2006), effectively employing an "expanding window" that starts at a three-year minimum.

## Dynamic Strategy

Each month the inflation regime is determined using the realized CPI (YoY), and the appropriate allocation is chosen based on the strategy identified for that regime.



## Index Calculations

For all calculations, we use the monthly total return  $R$  for the underlying indices. The lookback window size (in months) is  $N = 120$ .  $\bar{R}_k$  is the average return of the index  $k$  over the lookback window.

### Calculation of VolWt Allocation

The volatility of each underlying index is calculated as follows:

$$Vol_k = \sqrt{\frac{1}{N-1} \left( \sum_i R_{i,k} - \bar{R}_k \right)^2}$$

The weights are then calculated as

$$W_k = \frac{1/Vol_k}{\sum_k 1/Vol_k}$$

### Calculation of Inflation Beta

The inflation beta is calculated by running an ordinary least squares (OLS) regression of the rolling 12-month cumulative return  $R_{12m}$  against the CPI (YoY) inflation rate  $I$ .

$$R_{12m} = \alpha + \beta I$$

### Calculation of ProIB Allocation

Given the inflation beta  $\beta_k$  of each underlying index, the weights of the ProIB portfolio are calculated as:

$$W_k = \frac{B_k}{\sum_k B_k}$$

where:

$$B_k = 1 + \beta_k \text{ if } \beta_k \geq 0 \text{ else } \frac{1}{1-\beta_k}$$

# Index Maintenance

## Rebalancing

The rebalancing reference date is the day on which CPI data is released by the U.S. Bureau of Labor Statistics.<sup>2</sup>

Rebalancing Schedule	
Rebalancing Frequency	Monthly
Rebalancing Reference Date	Day of CPI announcement
Rebalancing Effective Date	After the close of the next business day following CPI announcement
Underlying Index Reference Date	Last business day of the previous month

## Currency of Calculation and Additional Index Return Series

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 the [S&P DJI Methodology & Regulatory Status Database](#).

*For information on various index calculations, 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 date, and base value are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P Multi-Asset Dynamic Inflation Strategy Index	08/31/2021	03/20/2000	03/20/2000	100

<sup>2</sup> CPI release dates can be found here: [https://www.bls.gov/schedule/news\\_release/cpi.htm](https://www.bls.gov/schedule/news_release/cpi.htm).

# Index Governance

## **Index Committee**

An S&P Dow Jones Indices' Index Committee maintains the index. All Committee members are full-time professional members of S&P Dow Jones Indices' staff. The Committee meets regularly.

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.

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**

Index data is evaluated daily. Anything affecting the daily index calculation is announced to clients via an index announcement.

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

## **Holiday Schedule**

The index calculates when the U.S. equity markets are open. If any one of the markets is not open, closing price for the previous day is used.

*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 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 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

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

Index	Return Type	Bloomberg	RIC
S&P Multi-Asset Dynamic Inflation Strategy Index	Total Return	SPMADIST	.SPMADIST

## 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).

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