S&P Japan Bond Index

Methodology

June 2020
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Disclaimer
Introduction

Index Objective
The S&P Japan Bond Index is comprised of a universe of Japanese yen-denominated bonds issued in Japan and measures the market value weighted performance of the Japanese bond market.

Index Family
The S&P Japan Bond Index is the flagship bond index. The index tracks the performance of Japanese yen-denominated government and corporate bonds issued in Japan. The index is a broad, transparent and independent benchmark.

Sector level indices include:
- S&P Japan Government Bond Index
- S&P Japan Corporate Bond Index

The four main government categories are:
- Sovereign Bond
- Government Bill
- Agency Bond
- Provincial Bond

The four main corporate categories are:
- Financials
- Utilities
- Services
- Industrials

The structure of the S&P Japan Bond Index family currently consists of:
S&P Japan Bond Index:
- S&P Japan Government Bond Index:
  - S&P Japan Sovereign Bond Index
  - S&P Japan Government Bill Index
  - S&P Japan Agency Bond Index
  - S&P Japan Provincial Bond Index
- S&P Japan Corporate Bond Index:
  - S&P Japan Financials Bond Index
  - S&P Japan Services Bond Index
  - S&P Japan Utilities Bond Index
  - S&P Japan Industrials Bond Index

1 For information on the S&P Japan Sovereign Bond Index, please refer to the S&P Global Bond Indices Methodology available at www spdji com.
2 For information on the S&P Japan Government Bill Index, please refer to the S&P Global Bill Index Series Methodology available at www spdji com.
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:

<table>
<thead>
<tr>
<th>Supporting Document</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P Dow Jones Indices’ Fixed Income Index Mathematics Methodology</td>
<td><a href="#">Index Mathematics Methodology</a></td>
</tr>
</tbody>
</table>

This index methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of the 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

Eligibility Factors

Currency.  Securities must be issued in Japanese yen.

Maturity.  Each bond must have a maturity greater than one month from the rebalancing date. No bond matures in the index.

Country of Issue.  Securities must be government or corporate debt issued in Japan.

Coupon Type.  The following coupon types are included:
- Fixed
- Zero
- Step-Up
- Fixed-to-Float

Optionality.  Bullet, callable, and callable-perpetual (provided they are at least one-month from the first call) are included. Fixed-to-floating rate securities qualify if they are in the fixed phase and have at least one month until the date they transition to floating.

Exclusions.  The following bond types are specifically excluded from the index:
- STRIPS
- Inflation-linked
- Floating-rate issues
- Puttable bonds
- Sukuk bonds
- Sinkable bonds

Minimum Notional Outstanding.  Bonds must meet the minimum notional outstanding and market of issue criteria detailed in the following table:

<table>
<thead>
<tr>
<th>Agency Bond</th>
<th>Provincial Bond</th>
<th>Corporate Bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 billion</td>
<td>20 billion</td>
<td>10 billion</td>
</tr>
</tbody>
</table>

Settlement.  Bonds issued up to the rebalancing reference date (regardless of the settlement date). Standard index settlement convention is same-day (e.g., T+0), unless otherwise specified. For month-ends that fall on a weekend, the interest accrued during the month will be reflected within the calendar month, regardless of settlement convention. For rates that are not available at month-end (e.g., a rate with an unknown reset), the accrual will be based on the current rate and adjusted the first business day of the next month.

Credit Rating Quality.  No credit rating criteria is required. Bonds in default are removed at the next rebalancing.

Pricing.  Bid Price - Refinitiv. Bonds not priced by the designated pricing source are ineligible for index inclusion.
Index Construction

Index Calculations

The S&P Japan Bond Index and related sub-indices are market value weighted.

The total return is calculated by aggregating the interest return, reflecting the return due to paid and accrued interest, and price return, reflecting the gains or losses due to changes in the end-of-day price and principal repayments.

For further details regarding Index Calculations, please refer to S&P Dow Jones Indices’ Fixed Income Index Mathematics Methodology.
Index Maintenance

Rebalancing

Indices are reviewed and rebalanced in accordance with their stated schedule. The Index Committee, nevertheless, reserves the right to make adjustments to an index at any time that it believes appropriate.

Additions, deletions and other changes to the index arising from the rebalancing are made provided the security’s reference information and pricing are available by designated pricing and data providers on the rebalancing reference date. Changes to the index are published on the announcement date and become effective on the rebalancing date. Information related to the rebalancing is obtained and disseminated after the close of business.

<table>
<thead>
<tr>
<th>Rebalancing Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebalancing Frequency</td>
</tr>
<tr>
<td>Rebalancing Date</td>
</tr>
<tr>
<td>Announcement Date</td>
</tr>
<tr>
<td>Reference Date</td>
</tr>
</tbody>
</table>

* All days reflect after the market close

Ongoing Maintenance

The indices are also reviewed on an ongoing basis to account for the following:

- When an index bond is in default or misses an interest payment, the price reported by the pricing source is used. However, the Index Committee may determine that the bond be removed from the index at a different price and may specify a price of 0.00. The decision of the Index Committee is final.

- If an index bond is no longer priced by the pricing source, the last available price is used. However, the Index Committee may determine that a different price be used. The decision of the Index Committee is final. For clarity, index bonds that are no longer priced by the pricing source fail to meet the pricing eligibility factors and are removed at the next rebalancing date. If the bond is priced for at least one of the five business days prior to the rebalancing announcement date, the bond remains in the index. Otherwise, it is removed from the index at the subsequent rebalancing date.

Reinvestment Returns from Monthly Cash Flows

All cash, including interest payments and principal prepayments, are kept in cash until the next rebalance date.

Currency of Calculation and Additional Index Return Series

The indices are calculated in Japanese yen.

Additional currency and currency hedged versions of the indices, as well as maturity, sector, and rating-based sub-indices, may be available. For a list of available sub-indices and tickers, please refer to S&P Dow Jones Indices’ Fixed Income Index Directory available at www.spdji.com.
For more information on index calculation, please refer to S&P Dow Jones Indices’ Fixed Income 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.

Base Dates and History Availability

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

<table>
<thead>
<tr>
<th>Index</th>
<th>Launch Date</th>
<th>First Value Date</th>
<th>Base Date</th>
<th>Base Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P Japan Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Government Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Sovereign Bond Index</td>
<td>10/08/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Agency Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Provincial Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Corporate Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Financials Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Services Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Utilities Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
<tr>
<td>S&amp;P Japan Industrials Bond Index</td>
<td>10/21/2014</td>
<td>01/30/1998</td>
<td>04/30/2014</td>
<td>100</td>
</tr>
</tbody>
</table>
Index Governance

Index Committee

The S&P Dow Jones Indices’ Asia Fixed Income Index Committee maintains the indices. All committee members are full-time professionals at S&P Dow Jones Indices. Meetings are held quarterly and whenever deemed appropriate.

The Index Committee oversees the day-to-day management of the indices, including the monthly rebalancing, determinations of intra-rebalancing changes to the indices, and maintenance and inclusion policies, including additions or deletions of bonds and other matters affecting the maintenance and calculation of the indices.

In fulfilling its responsibilities, the Index Committee has full and complete discretion to (i) amend, apply, or exempt the application of index rules and policies as circumstances may require and (ii) add, remove, or by-pass any bond in determining the composition of an index.

The Committee may rely on any information or documentation submitted to it or gathered by it that the Index Committee believes to be accurate. The Index Committee reserves the right to reinterpret publicly available information and to make changes to the indices based on a new interpretation of that information at its sole discretion. All Index Committee discussions are confidential.

The Index Committee is separate from and independent of other analytical groups at S&P Global. In particular, the Index Committee has no access to or influence on decisions by S&P Global Ratings analysts.

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’ Fixed Income Policies & Practices Methodology.
Index Policy

Announcements
Announcements of any relevant information pertaining to the S&P Japan Bond Index and related sub-indices are made at after the close. Press releases are posted on the S&P Dow Jones Indices’ Web site at www.spdji.com.

Holiday Schedule
The S&P Japan Bond Index and related sub-indices are calculated daily, throughout the calendar year, except New Year’s Day (January 1st).

A complete holiday schedule for the year is available on S&P Dow Jones Indices’ Web site at 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.

End-of-Day Calculation
Index levels are calculated at the end of each business day, via S&P Dow Jones Indices' Web site. This may be subject to change.

Index Releases
Releases are issued by S&P Dow Jones Indices at the end of the business day.

Recalculation Policy
For information on the recalculation policy please refer to S&P Dow Jones Indices’ Fixed Income Policies & Practices Methodology.

For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices’ Fixed Income Policies & Practices Methodology.

Contact Information
For questions regarding an index, please contact: index_services@spglobal.com.
Index Dissemination

Index levels are available through S&P Dow Jones Indices' website at www.spdji.com, major quote vendors (see codes below), numerous investment-oriented websites, 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.

<table>
<thead>
<tr>
<th>Index (Total Return Index)</th>
<th>Ticker</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P Japan Bond Index</td>
<td>SPBJPCOT</td>
</tr>
<tr>
<td>S&amp;P Japan Government Bond Index</td>
<td>SPBJPGOT</td>
</tr>
<tr>
<td>S&amp;P Japan Sovereign Bond Index</td>
<td>SPBJPSOT</td>
</tr>
<tr>
<td>S&amp;P Japan Agency Bond Index</td>
<td>SPBJPAGT</td>
</tr>
<tr>
<td>S&amp;P Japan Provincial Bond Index</td>
<td>SPBJPAGT</td>
</tr>
<tr>
<td>S&amp;P Japan Corporate Bond Index</td>
<td>SPBJPCPT</td>
</tr>
<tr>
<td>S&amp;P Japan Financials Bond Index</td>
<td>SPBJPCPT</td>
</tr>
<tr>
<td>S&amp;P Japan Services Bond Index</td>
<td>SPBJPCST</td>
</tr>
<tr>
<td>S&amp;P Japan Utilities Bond Index</td>
<td>SPBJPCUT</td>
</tr>
<tr>
<td>S&amp;P Japan Industrials Bond Index</td>
<td>SPBJPCIT</td>
</tr>
</tbody>
</table>

**Index Data**

Daily index level data is available via subscription.

*For product information, please contact S&P Dow Jones Indices, www.spdji.com/contact-us.*

**Web site**

*For further information, please refer to S&P Dow Jones Indices' Web site at www.spdji.com.*
# Methodology Changes

Methodology changes since January 1, 2015 are as follows:

<table>
<thead>
<tr>
<th>Change</th>
<th>Effective Date (After Close)</th>
<th>Previous Methodology</th>
<th>Updated Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusion of Government Holdings from Par Amount Outstanding for Index Eligibility Purposes</td>
<td>12/31/2019</td>
<td>Government holdings are included in determining par amount outstanding for sovereign bonds.</td>
<td>Government holdings are excluded in determining par amount outstanding for sovereign bonds.</td>
</tr>
<tr>
<td>Eligible Bonds</td>
<td>08/30/2019</td>
<td>Sinkable bonds are included.</td>
<td>Sinkable bonds are excluded.</td>
</tr>
</tbody>
</table>
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