

# **S&P Taxable Municipal Bond Index** *Methodology*

January 2020

# Table of Contents

Introduction	3
<b>Index Objective and Highlights</b>	<b>3</b>
<b>Index Family</b>	<b>3</b>
<b>Supporting Documents</b>	<b>3</b>
Eligibility Criteria	4
<b>Eligibility Factors</b>	<b>4</b>
<b>Sub-Indices</b>	<b>4</b>
Index Construction	6
<b>Constituent Weightings</b>	<b>6</b>
<b>Index Calculations</b>	<b>6</b>
Index Maintenance	7
<b>Rebalancing</b>	<b>7</b>
<b>Deletions</b>	<b>7</b>
<b>Currency of Calculation and Additional Index Return Series</b>	<b>8</b>
<b>Base Date</b>	<b>8</b>
Index Governance	9
<b>Index Committee</b>	<b>9</b>
Index Policy	10
<b>Announcements</b>	<b>10</b>
<b>Holiday Schedule</b>	<b>10</b>
<b>Rebalancing</b>	<b>10</b>
<b>End-of-Day Calculation</b>	<b>10</b>
<b>Index Releases</b>	<b>10</b>
<b>Recalculation Policy</b>	<b>10</b>
<b>Contact Information</b>	<b>10</b>
Index Dissemination	11
<b>Tickers</b>	<b>11</b>
<b>Index Data</b>	<b>11</b>
<b>Web site</b>	<b>11</b>

Appendix I – Defined Terms	12
<b>Defined Terms</b>	<b>12</b>
Appendix II – Index and Sector Directory	13
<b>Index and Sector Directory</b>	<b>13</b>
Appendix III – Methodology Changes	15
<b>Methodology Changes</b>	<b>15</b>
Disclaimer	16

# Introduction

## Index Objective and Highlights

The S&P Taxable Municipal Bond Index measures the market-value-weighted performance of the investment-grade U.S. taxable municipal bond market. Index constituents undergo a monthly review and rebalancing, in order to ensure that the index remains representative of the broader market.

## Index Family

The S&P Taxable Municipal Bond Index seeks to be a broad-based national index, which includes a series of sub-indices. At this time the sub-indices are:

- S&P Taxable Municipal Bond Select Index
- S&P Short Term Taxable Municipal Bond Index
- S&P Short Intermediate Term Taxable Municipal Bond Index
- S&P Long Intermediate Term Taxable Municipal Bond Index
- S&P 15 Year+ Taxable Municipal Bond Index
- S&P Municipal BAB Index
- S&P Municipal BAB Select Index
- S&P Taxable Municipal AAA Rated Bond Index
- S&P Taxable Municipal AA Rated Bond Index
- S&P Taxable Municipal A Rated Bond Index
- S&P Taxable Municipal BBB Rated Bond Index
- S&P Taxable Municipal Revenue Bond Infrastructure Index
- S&P Taxable Municipal Revenue Bond Infrastructure Select Plus Index
- S&P Taxable Municipal USD250 Million Par Bond Index

*Please refer to Appendix I for a list of defined terms used throughout this document.*

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

## Eligibility Factors

On the rebalancing reference date, a bond must meet all of the following criteria in order to be classified as an eligible bond.

**Issuer.** The bond issuer must be a U.S. state (including the Commonwealth of Puerto Rico and U.S. territories) or local government or agency.

**Dated Date.** New additions must have a dated date later than Dec 31, 2010 to be eligible for index inclusion.

**Taxability.** The interest on the bonds must be subject to U.S. federal taxation.

**Investment Grade.** The bond must have a rating of at least BBB- by S&P Global Ratings (S&P), Baa3 by Moody's, or BBB- by Fitch. A bond must be rated by at least one of the three rating agencies in order to qualify for the index. For the avoidance of doubt, the lowest rating is used in determining if a bond meets index criteria. In determining eligibility, S&P Dow Jones Indices looks at the long-term rating, either insured or uninsured. If either a rating is not available or does not meet eligibility requirements, S&P Dow Jones Indices then looks at the underlying rating. Non-rated bonds are excluded.

**Issuance.** The bond must be denominated in U.S. dollars and subject to U.S. federal taxation. For clarity, the following bond types are specifically excluded:

- Commercial paper
- Derivative securities (inverse floaters, forwards, swaps)
- Non-rated bonds (except pre-refunded/escrowed to maturity bonds)
- Variable rate debt (except for known step-up/down coupon schedule bonds)

**Minimum Par Amount.** The bond must have a minimum par amount of US\$ 1 million to be eligible for index inclusion.

**Pricing.** Securities Evaluations | ICE Data Services must provide daily pricing on the bond.

**Minimum Term.** As of the next rebalancing date, the bond must have a minimum term to maturity greater than one calendar month. For any bond with an announced full call, the call date must be greater than one calendar month.

## Sub-Indices

**S&P Taxable Municipal Bond Select Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with a minimum par amount of US\$ 10 million and, on the rebalancing date, 75% of the market value of the index are from bonds that are part of a deal where the original offering amount was at least US\$ 100 million.

**S&P Short Term Taxable Municipal Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with a maximum maturity of up to but not including one year, as measured from the first business day of the month.

**S&P Short Intermediate Term Taxable Municipal Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with a minimum maturity of one year and a maximum maturity of up to but not including five years, as measured from the first business day of the month.

**S&P Long Intermediate Term Taxable Municipal Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with a minimum maturity of five years and a maximum maturity of up to but not including 15 years, as measured from the first business day of the month.

**S&P 15 Year+ Taxable Municipal Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with a minimum maturity of 15 years or longer, as measured from the first business day of the month.

**S&P Municipal BAB Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index that are designated as Build America Bonds issued under “The American Recovery and Reinvestment Act of 2009”, with a minimum par amount of US\$ 1 million.

**S&P Municipal BAB Select Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index that are designated as Build America Bonds issued under “The American Recovery and Reinvestment Act of 2009”, with a minimum par amount of US\$ 100 million.

**S&P Taxable Municipal AAA Rated Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with an S&P rating of AAA.

**S&P Taxable Municipal AA Rated Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with an S&P rating of AA-, AA, or AA+.

**S&P Taxable Municipal A Rated Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with an S&P rating of A-, A, or A+.

**S&P Taxable Municipal BBB Rated Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with an S&P rating of BBB-, BBB, or BBB+.

**S&P Taxable Municipal Revenue Bond Infrastructure Index.** The index consists of revenue bonds in the S&P Taxable Municipal Bond Index that conform to the combined infrastructure sector Purpose Class and Subclass combinations outlined in *Appendix II*. Bonds that are pre-refunded/escrowed to maturity are not included.

**S&P Taxable Municipal Revenue Bond Infrastructure Select Plus Index.** The index consists of revenue bonds in the S&P Taxable Municipal Bond Index that conform to the combined infrastructure sector Purpose Class and Subclass combinations outlined in *Appendix II*. The minimum par amount outstanding for index eligibility purposes is US\$ 100 million. Bonds that are pre-refunded/escrowed to maturity are not included.

**S&P Taxable Municipal USD250 Million Par Bond Index.** The index consists of bonds in the S&P Taxable Municipal Bond Index with a minimum par amount outstanding of US\$ 250 million.

# Index Construction

## Constituent Weightings

**Constituent Concentration Requirements.** At each rebalancing, the following constraints are applied:

- No single issuer can exceed 25% of the weight of the index.
- The aggregate weight of issuers with a weight of at least 5% cannot exceed 50% of the total weight of the index.

All excess weights are proportionally distributed to all uncapped bonds. Prices as at the rebalancing reference date are used in determining an index bond concentration.

## Index Calculations

The index is a market-value-weighted index. Securities Evaluations | ICE Data Services reports the price of each bond in the index. The prices used in the index calculation add the accrued interest for each bond to the price reported by Securities Evaluations | ICE Data Services.

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 Securities Evaluations | ICE Data Services' reported end-of-day price.

Questions and requests for written criteria and methodology regarding Securities Evaluations | ICE Data Services can be made by contacting ICE Data Services via email at [SPSE\\_Operations@spglobal.com](mailto:SPSE_Operations@spglobal.com).

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

# Index Maintenance

The index is maintained in accordance with the following rules:

- New eligible bonds are added to the index on the next rebalancing date, subject to the schedule of the monthly rebalancing procedures.
- Any index bond that fails to meet any one of the eligibility factors is removed from the index on the next rebalancing date.
- Par amounts of index bonds are adjusted on the rebalancing date to reflect any changes that have occurred since the previous rebalancing date, due to partial calls, tenders, etc. However, where there is notification at any time during the month that a callable index bond will be called in its entirety, the relevant index bond is removed from the index on the next rebalancing date.
- Any index bond that is downgraded below investment grade between rebalancing dates will be removed at the next rebalancing date.
- When an index bond is in default or misses an interest payment, the price reported by Securities Evaluations | ICE Data Services 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.
- If an index bond is no longer priced by Securities Evaluations | ICE Data Services, the last available price from Securities Evaluations | ICE Data Services is used. However, the Index Committee may determine that a different price be used. For clarity, index bonds that are no longer priced by Securities Evaluations | ICE Data Services fail to meet the pricing eligibility factor and are removed at the next rebalancing date.

## Rebalancing

The index is reviewed and rebalanced on a monthly basis.

## Deletions

Bonds are deleted from the index at the rebalancing for the following reasons:

- Bonds that are completely called or tendered during the course of the month.
- Bonds that are scheduled to be completely called or redeemed during the course of the calendar month following the rebalancing date.
- Bonds where partial calls and redemptions have reduced the known outstanding amount to less than the minimum par amount required during the course of the month.
- Any bond that is downgraded below investment grade between rebalancing dates.

Publicly available information, up to and including the reference date, is considered in the rebalancing. Additions, deletions and other changes to the index arising from the monthly rebalancing are published on the announcement date. Index changes published in the announcement are not normally subject to revision and become effective after the close on the rebalancing date.

Rebalancing Schedule	
Rebalancing Frequency	Monthly
Rebalancing Date	Last day of the rebalancing period (T)
Announcement Date	T minus 3
Reference Date	T minus 4



### **Currency of Calculation and Additional Index Return Series**

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

*For more information on currency and currency hedged indices, please refer to S&P Dow Jones Indices' Fixed Income Index Mathematics Methodology.*

### **Base Date**

The index has a base date of February 2, 2010 with a base value of 100.

# Index Governance

## Index Committee

S&P Dow Jones Indices' Municipal Bonds Index Committee maintains the index. The Committee is comprised of full-time employees of S&P Dow Jones Indices. Meetings are held monthly and, from time to time, as needed.

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

In fulfilling its responsibilities, the 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 the index.

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

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 index are made after market close. Press releases are posted on S&P Dow Jones Indices' Web site at [www.spdji.com](http://www.spdji.com).

## **Holiday Schedule**

The index is calculated when the Securities Industry and Financial Markets Association (SIFMA®) declares the U.S. fixed income markets to be open.

*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.

## **End-of-Day Calculation**

Index levels are calculated at the end of each business day, after market close, 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, after market close.

## **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 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' website at [www.spdji.com](http://www.spdji.com), and major quote vendors (see codes below).

## 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	Bloomberg
S&P Taxable Municipal Bond Index	SPMUTT
S&P Taxable Municipal Bond Select Index	SPMUTSLT
S&P Short Term Taxable Municipal Bond Index	SPMUTS
S&P Short Intermediate Term Taxable Municipal Bond Index	SPMUTSI
S&P Long Intermediate Term Taxable Municipal Bond Index	SPMUTLT
S&P 15 Year+ Taxable Municipal Bond Index	SPMUT15T
S&P Municipal BAB Index	SPMUTBT
S&P Municipal BAB Select Index	SPMUTBST
S&P Taxable Municipal AAA Rated Bond Index	SPMUT3AT
S&P Taxable Municipal AA Rated Bond Index	SPMUT2AT
S&P Taxable Municipal A Rated Bond Index	SPMUT1AT
S&P Taxable Municipal BBB Rated Bond Index	SPMUT3BT
S&P Taxable Municipal Revenue Bond Infrastructure Index	SPMTF
S&P Taxable Municipal Revenue Bond Infrastructure Select Plus Index	SPMTFS
S&P Taxable Municipal USD250 Million Par Bond Index	SPMUTS2

## 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](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 – Defined Terms

## Defined Terms

**Announcement Date.** The date on which changes to the index are published after the market close, three business days prior to the last business day of the month.

**Business Day.** Any day that U.S. municipal bonds are traded, as determined by the Securities Industry and Financial Markets Association (SIFMA).

**Close.** The end of a calendar or business day for the purpose of calculating index values and other statistics, currently 04:00 PM New York Time.

**Eligible Bond.** A bond that meets all of the eligibility criteria, based on publicly available information as of the reference date.

**Index.** S&P Taxable Municipal Bond Index and/or related sub-indices.

**Index Bond.** A bond that is included in the index.

**Par Amount.** The total par or “face value” amount outstanding of an index bond or an eligible bond, net of partial calls, tenders and mandatory sinking fund payments.

**Rebalancing Date.** The last business day of each month, when the changes to the index published on the announcement date become effective

**Reference Date.** The date on which publicly available information, up to and including the close on the fourth business day preceding the rebalancing date, is considered in the rebalancing.

# Appendix II – Index and Sector Directory

## Index and Sector Directory

Index	GO/Rev	Purpose Class*	Subclass*	Other Rule
Main Index (Bonds priced by Securities Evaluations   ICE Data Services)	All	All		
Infrastructure Index	Rev	See Below		
		Transportation	Airport	
		Transportation	Harbor/Channel	
		Transportation	Port Authority	
		Transportation	Marine Terminal	
		Transportation	Turnpike	
		Transportation	Bridge & Toll Road	
		Transportation	Bus	
		Transportation	Combined Transportation	
		Transportation	Facility	
		Transportation	Highway	
		Transportation	Mass Transit	
		Transportation	Pooled Financing	
		Transportation	Railroad	
		Transportation	Roadway/Street	
		Transportation	Various Purpose	
		Public Utility District		
		Utility	Power	
		Utility	Electric	
		Utility	Nuclear	
		Utility	Solid Waste Disposal	
		Utility	Resource Recovery	
		Utility	Water	
		Utility	Sewer	
		Utility	Combined Utility	
		Utility	Natural Gas	
		Utility	General Utility	
		Utility	Telecommunication	
		Combined Utility	Water	
		Combined Utility	Sewer	
		Metropolitan District	Water	
		Metropolitan District	Sewer	

\* As determined by Securities Evaluations | ICE Data Services.

Index	GO/Rev	Purpose Class*	Subclass*	Other Rule
Infrastructure Select Plus Index	Rev	See Below		US\$ 100 million par amount outstanding
		Transportation	Airport	
		Transportation	Harbor/Channel	
		Transportation	Port Authority	
		Transportation	Marine Terminal	
		Transportation	Turnpike	
		Transportation	Bridge & Toll Road	
		Transportation	Bus	
		Transportation	Combined Transportation	
		Transportation	Facility	
		Transportation	Highway	
		Transportation	Mass Transit	
		Transportation	Pooled Financing	
		Transportation	Railroad	
		Transportation	Roadway/Street	
		Transportation	Various Purpose	
		Public Utility District		
		Utility	Power	
		Utility	Electric	
		Utility	Nuclear	
		Utility	Solid Waste Disposal	
		Utility	Resource Recovery	
		Utility	Water	
		Utility	Sewer	
		Utility	Combined Utility	
		Utility	Natural Gas	
		Utility	General Utility	
		Utility	Telecommunication	
		Combined Utility	Water	
		Combined Utility	Sewer	
		Metropolitan District	Water	
		Metropolitan District	Sewer	

\* As determined by Securities Evaluations | ICE Data Services.

# Appendix III – Methodology Changes

## Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Previous	Methodology Updated
Change to the Dated Date Criterion	10/02/2017	Bonds must have a dated date within three months of the monthly rebalancing in order to be eligible for index inclusion.	New additions must have a dated date later than Dec 31, 2010 to be eligible for index inclusion.
Elimination of the Mutual Fund Holding Criterion	10/02/2017	Bonds must be held by mutual funds in order to be eligible for index inclusion.	--



# 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, 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.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global's other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Dow Jones Indices LLC does not act as a fiduciary or an investment advisor. While S&P Dow Jones Indices has obtained information from sources they believe to be reliable, S&P Dow Jones Indices does not perform an audit or undertake any duty of due diligence or independent verification of any information it receives.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).

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.