

# **Custom Benchmarks**

S-Network All Taxable ex-Foreign plus Capped Muni CEF Index (SNTDCM)

S-Network National Tax-Exempt Muni CEF Index (SNTEMC)

S-Network All Taxable Fixed Income CEF Index (SNTFIC)

**Index Rules and Methodology** 

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# The S-Network Closed-End Fund Indexes

# Official Rule Book

#### I. General Description

The S-Network Closed-End Fund Indexes (the "Indexes") are mutual fund indexes designed to serve as benchmarks for closed-end funds listed in the US. The Indexes employ a market capitalization weighting methodology designed to assure accurate investment exposure across the various business segments that together comprise the closed-end fund market.

There are three Indexes in the S-Network Closed-End Fund Index family:

- The S-Network All Taxable ex-Foreign plus Capped Muni CEF Index (SNTDCM)
- The S-Network National Tax-Exempt Muni CEF Index (SNTEMC)
- The S-Network All Taxable Fixed Income CEF Index (SNTFIC)

The Indexes contain closed-end funds selected from a universe of approximately 500 securities domiciled in the United States.

The selection criteria include requirements for sector inclusion and primary exchange.

Rule changes will be announced 60 days in advance of implementation.

### II. The Index Committee

The S-Network Closed-End Fund Index Committee (the "Committee") will be composed of no fewer than three members. The Committee Chairman will have extensive experience with and expertise in US closed-end funds and US closed-end fund markets. The other members will have experience in financial markets, indexes and/or financial products.

The Committee will be responsible for maintaining a comprehensive list of closed end funds, divided into sectors, which are determined based on the closed-end fund's stated investment style.

Impartial selection criteria will then be applied to these closed-end funds to determine whether or not they should be included in the index.

The Committee will then review the closed-end funds to be included in the Indexes and may reject any fund that it believes does not meet its overall standards for risk and sound business practice.

The Committee meets quarterly, either in person or via teleconference, to discuss index issues and organize the quarterly or special rebalancings.

The composition of the Committee may from time to time be changed to reflect changes in market conditions.

#### III. Index Value at Inception

All variants of the S-Network Closed-End Fund Indexes had values at inception of 1000, on their inception date of December 30, 2005. The Indexes are calculated on a PriceOnly, a Total Return and (excluding SNTEMC) a Net Total Return basis.

# IV. Eligibility Criteria.

Only closed-end funds that meet the following eligibility criteria are included in the Indexes.

- i) The closed-end fund must be organized under the laws of the United States and meet all legal and regulatory criteria pursuant primarily to the relevant sections (Section 4(a)(2) and Section 23) of the Investment Company Act of 1940, and also in compliance with the relevant sections of the Investment Company Acts of 1933 and 1934.
- ii) The closed-end fund must be included in one of the Level I classifications used to distinguish sectors. These are a) equity; b) fixed income; c) commodity and; d) municipal. The indexes include the following Level II sectors:

# SNTDCM includes the following Level II sectors:

US General Equity Funds (10111)
US Hybrid Funds (10112)

Diversified Developed International Equity Funds (10121)

Global Equity Funds (10141)
Global Hybrid Funds (10142)
Option Income Funds (10151)

MLP Funds (10152)

US Sector Equity Funds (10153)

International Sector Equity Funds (10154)
Global Sector Equity Funds (10155)
Real Estate, including REITs Funds (10156)

Utilities Funds (10157)

US Government Bond Funds (20111)
US Investment Grade Bond Funds (20112)
US High Yield Bond Funds (20113)

US Sector Bond Funds (20114)
US Multi Sector Bond Funds (20115)
Taxable Municipal Bond Funds (20116)
Diversified US Bond Fund (20117)

Developed International Government Bond Funds (20121)

Developed International Investment Grade Bond Funds (20122)

Developed International High Yield Bond Funds (20123)
Developed International Sector Bond Funds (20124)
Developed International Multi Sector Bond Funds (20125)
Emerging Market Government Bond Funds (20131)
Emerging Market Corporate Bond Funds (20132)
Emerging Market Multi Sector Bond Funds (20133)

Global Income Funds (20141)
Bank Loan Funds (20151)
High Yield Bond Funds (20152)
Collateralized Loan Funds (20153)
Convertible Bond Funds (20154)
Short Duration Bond Funds (20155)
Preferred Stock Funds (20156)

Diversified Municipal Bond Funds (50111)
Investment Grade Municipal Bond Funds (50112)
High Yield Municipal Bond Funds (50113)
Single Commodity Funds (60111)

Diversified Commodity Funds (60112)

#### SNTEMC includes the following Level II sectors:

Diversified Municipal Bond Funds (50111) Leveraged Municipal Bond Funds (50122)

Investment Grade Municipal Bond Funds (50112) Leveraged Non-Insured Municipal Bond Funds (50123)

High Yield Municipal Bond Funds (50113)

# SNTFIC includes the following Level II sectors:

US Government Bond Funds (20111)

Developed International Single Country Bond Funds (20126)

US Investment Grade Bond Funds (20112)
US High Yield Bond Funds (20113)
US Sector Bond Funds (20114)
Emerging Market Corporate Bond Funds (20132)
Emerging Market Multi Sector Bond Funds (20133)

US Multi Sector Bond Funds (20115) Emerging Market Single Country Bond Funds (20134)

Taxable Municipal Bond Funds (20116) Global Income Funds (20141)

Diversified US Bond Funds (20117)

Developed International Government Bond Funds (20121)

Developed International Investment Grade Bond Funds (20122)

Bank Loan Funds (20151)

High Yield Bond Funds (20152)

Collateralized Loan Funds (20153)

Developed International High Yield Bond Funds (20123)

Convertible Bond Funds (20154)

Developed International Sector Bond Funds (20124)

Short Duration Bond Funds (20155)

Developed International Multi Sector Bond Funds (20125)

Preferred Stock Funds (20156)

iii) The closed-end fund's shares must trade on a recognized North American stock exchange that provides a "last closing price". (National Stock Exchange, formerly NASDAQ, stocks must be "reported securities" under 11Aa3-1 of the Securities and Exchange Act, i.e., National Market System stocks.)

iv) A fund must have been trading for more than 60 calendar days ("Recent IPO") prior to a snapshot date to be included in the index.

#### V. Constituent Weightings

i) Closed-end funds are weighted based on their market capitalization.

# VI. Rules for Reconstitutions, Rebalances, and Index Changes

The S-Network Closed-End Fund Indexes are calculated by S-Network Global Indexes, Inc. (the "Calculation Agent"). The Calculation Agent is also responsible for index maintenance and price dissemination. The calculation, maintenance and dissemination rules are as follows:

**Index Changes.** Index changes take place at each rebalancing date, except in the event of certain corporate actions, such as mergers, acquisitions, and delistings. In such cases, the change is applied on the effective date of the action, unless otherwise determined by

the Index Committee. Share increases and decreases are reflected on the rebalancing date. Whenever possible, changes will be announced at least two business days prior to their implementation.

**Index Reconstitutions.** The Indexes are reconstituted quarterly, during which the Index Committee submits to the Compilation Agent lists of funds that are eligible for inclusion in the Indexes. All candidates and current constituents are screened against the "Eligibility Criteria", and weights are applied based on the weighting methodology described in Section V.

**Additions and Deletions.** Additions and Deletions to the Indexes are made 1) at the close of trading prior to the quarterly reconstitution effective dates (first business day of the calendar quarter) and 2) in the event of the deletion of a constituent stock due to a corporate action. When a stock is deleted, no replacement stock is added.

Deletions are made at any time, in the event a fund is liquidated, de-listed, files for bankruptcy, is acquired or merges with another fund. Upon deletion, the weight of the removed fund is reallocated proportionately to the remaining constituents. Additions are made only upon the effective date of the quarterly rebalancing.

#### VII. Roles of Parties in the Quarterly Reconstitutions.

- i) The Committee, or its designee, will submit to the Compilation Agent (S-Network Global Indexes, Inc.) a list of index constituents for possible inclusion in the Indexes at the close of US markets on the first Friday of the rebalancing month.
- ii) The Compilation Agent will use the remaining criteria in Section IV to statistically screen the lists of the Indexes' constituents to confirm their eligibility for the Indexes based on closing prices and values as of the close of trading on the second Friday of the last month of each calendar quarter.
- iii) On the Wednesday prior to the third Friday of the rebalancing month, the Compilation Agent shall provide the Committee, or its designee, with lists of constituents for the Indexes.
- iv) The Committee shall approve or reject the changes and notify the calculation agent of its decisions not later than the third Friday of the rebalancing month.
- v) Not later than the Monday following the third Friday of the rebalancing month, the Index Committee or its designee will issue a press release announcing addition(s) to and/or deletion(s) from the Indexes. The press release will be posted on the Indexes' website.
- vi) The Compilation Agent will provide final share weights to the Committee or its designee on the Tuesday following the third Friday of the rebalancing month. Weights will be based on prices as of the close of trading on the preceding business day.

- vii) The Committee or its designee will approve the final share weights prior to the close of US markets on the same business day and will distribute this information to the Calculation Agent and all of the respective Index's licensees.
- viii) The effective date of the rebalancing will be on the close of business on the last business day of the calendar quarter. The Compilation Agent will post all final rebalancing data and information on its FTP server prior to the open on the next business day following the rebalancing date.
- ix) The Indexes will post all rebalancing data on their website prior to the open on the next business day following the rebalancing date.

#### VIII. Calculation of Index Values

- i) The Indexes will be calculated and disseminated in USD.
- ii) The Calculation Agent will also distribute Price and Total Return index values following the close of trading on US stock markets on each business day.

#### IX. Dissemination

Index values are disseminated in US dollars and Euro using the following tickers:

Index Name	Index Ticker
S-Network All Taxable ex-Foreign plus Capped Muni CEF Index (USD)	SNTDCM
S-Network All Taxable ex-Foreign plus Capped Muni CEF Index (EUR)	SNTDCME
S-Network All Taxable ex-Foreign plus Capped Muni CEF Net Total Return Index (EUR)	SNTDCMEN
S-Network All Taxable ex-Foreign plus Capped Muni CEF Total Return Index (EUR)	SNTDCMET
S-Network All Taxable ex-Foreign plus Capped Muni CEF Net Total Return Index (USD)	SNTDCMN
S-Network All Taxable ex-Foreign plus Capped Muni CEF Total Return Index (USD)	SNTDCMT
S-Network All Taxable ex-Foreign plus Capped Muni CEF NAV Index (USD)	SNTDCMV
S-Network National Tax-Exempt Muni CEF Index (USD)	SNTEMC
S-Network National Tax-Exempt Muni CEF Index (EUR)	SNTEMCE
S-Network National Tax-Exempt Muni CEF Total Return Index (EUR)	SNTEMCET
S-Network National Tax-Exempt Muni CEF Total Return Index (USD)	SNTEMCT
S-Network National Tax-Exempt Muni CEF NAV Index (USD)	SNTEMCV
S-Network All Taxable Fixed Income CEF Index (USD)	SNTFIC
S-Network All Taxable Fixed Income CEF Index (EUR)	SNTFICE
S-Network All Taxable Fixed Income CEF Net Total Return Index (EUR)	SNTFICEN
S-Network All Taxable Fixed Income CEF Total Return Index (EUR)	SNTFICET
S-Network All Taxable Fixed Income CEF Net Total Return Index (USD)	SNTFICN
S-Network All Taxable Fixed Income CEF Total Return Index (USD)	SNTFICT
S-Network All Taxable Fixed Income CEF NAV Index (USD)	SNTFICV

Values for the Indexes are distributed once daily, at approximately 6:00 PM (ET), Monday through Friday, excluding exchange holidays.

# X. Ongoing Maintenance

- i) In addition to the scheduled quarterly reviews, the Indexes are reviewed on an ongoing basis. Changes in index composition and related weight adjustments are necessary whenever there are extraordinary events such as liquidations, conversions, delistings, bankruptcies, mergers or takeovers involving index components. In these cases, each event will be taken into account on its effective date. A rebalance of the index affected by these events will be at the discretion of the Index Committee in the event a significant component is affected. Whenever possible, the changes in the index's components will be announced at least two business days prior to their implementation date.
- ii) Changes of Eligible Securities. In the event that a component no longer meets the eligibility requirements described in Section V herein, it will be removed from the index on the effective date of the next rebalancing.
- iii) Changes of Sector Classification. Funds are eligible for inclusion in the Indexes based on their inclusion in an applicable sector. Mergers, takeovers, and spin-offs, as well as changes in a fund's investment approach, may cause a fund to lose its eligibility. In such a circumstance, the fund will be deleted from the index on the effective date of the next rebalancing. A fund's classification may also require an immediate change as the result of a special event such as a merger, takeover or spin-off.
- iv) Mergers. If two index constituents merge, their component positions will be replaced by the surviving fund immediately. If an index constituent merges with a non-component fund, it will be removed from the index and its weight will be redistributed to all the remaining constituents on a proportional basis.
- v) Takeovers. If an index component is taken over by another component fund, the former will be removed from the index immediately upon completion of the takeover. If an index component is taken over by a non-component fund, it will be removed from the index and its weight will be redistributed to all the remaining constituents on a proportional basis.
- vi) Conversions: If an index component is converted to a non-eligible financial security, it will be deleted from the index 5 business days following the effective date of the conversion and the weight of the removed fund will be reallocated proportionately to the remaining constituents in the index, unless otherwise determined by the Index Committee.
- vii) Share Offerings, Tenders and Purchases. All Share Offerings, Tenders and Purchases that result in an increase or decrease of shares will be implemented at the quarterly review.

- viii) Removal of Funds Due to Delisting, Bankruptcy or Extreme Financial Distress. If an index constituent is de-listed by its primary market, or is in bankruptcy proceedings, it will be removed from the index.
  - \* If an index component is de-listed by its primary market due to failure to meet financial or regulatory requirements, it will be removed from the index and its weight will be reallocated to the remaining constituents in the index.
  - \* If an index component enters bankruptcy proceedings, it will be removed from the index and will remain ineligible for re-inclusion until it has emerged from bankruptcy. However, the Committee may, following a review of the bankrupt fund and the issues involved in the filing, decide to keep the fund in the index.
  - \* The Committee may, at its discretion, remove a fund it has determined to be in extreme financial distress from the Indexes, if the Committee deems the removal necessary to protect the integrity of the index and the interests of investors in products linked to the index.
- ix) Pricing of Stocks in Extreme Financial Distress for Index Maintenance.
  - \* When a fund is suspended from trading due to financial distress and subsequently de-listed by its primary market prior to resumption of trading, the Calculation Agent will use the best-available alternate pricing source to determine the value at which the fund should be removed from the index.
  - \* If the fund's primary market price is no longer available due to its suspension or de-listing, a current price from another exchange, such as a regional or electronic marketplace, may be used. In the absence of those prices in the case of U.S. securities, OTC Bulletin Board, OTC Equity (non-OTCBB stocks), and Pink Sheet traded prices could be applied in that order.
  - \* If neither a traded price nor a bid/asked range is available, the Committee will evaluate the status of the suspended stock. The Committee may consult with managers of portfolios linked to indexes in which the stock is a constituent in determining the value of the stock. If the Committee concludes that the security has become worthless or is likely to remain too illiquid to be traded, it will be removed from the index at .01 local currency of the stock.

## XI. Calculation and Adjustments

- i) Input Data Sources
  - \* The number of shares is determined separately for each class of stock. This information is obtained from regulatory filings and a variety of data vendors. The data also may be sourced from the funds themselves.
  - \* Corporate actions are sourced from public news services, regulatory filings and data vendors. The funds themselves may be used as an additional source.

ii) Index Formula. The index is calculated using a Laspeyres formula. This formula is used for the calculation of the return index and the price index. The only difference is that the divisor Dt is different for the two indexes (return index and price index).

The index is computed as follows:

$$\mathrm{Index}_{\mathfrak{t}} = \frac{\sum_{i=1}^{\mathfrak{n}} \left( p_{i\mathfrak{t}} \times q_{i\mathfrak{t}} \times r_{i\mathfrak{t}} \times f_{i\mathfrak{t}} \right)}{C_{\mathfrak{t}} \times \sum_{i=1}^{\mathfrak{n}} \left( p_{i\mathfrak{0}} \times q_{i\mathfrak{0}} \times r_{i\mathfrak{0}} \times f_{i\mathfrak{0}} \right)} \times \mathrm{Base\,Index\,Value} = \frac{M_{\mathfrak{t}}}{B_{\mathfrak{t}}} \times \mathrm{Base\,Index\,Value}$$

The above mentioned formula can be simplified as:  $Index_t = \frac{M_t}{D_t}$ 

Where:

$$D_t = \frac{B_t}{\text{base index value}} = \text{divisor at time (t)}$$

n = the number of stocks in the index

 $p_{i0}$  = the closing price of stock i at the base date

 $q_{i0}$  = the number of shares of fund i at the base date

 $r_{io} = 1$ 

 $f_{io} = 1$ 

 $p_{it}$  = the price of stock i at time (t)

 $q_{it}$  = the number of shares of fund i at time (t)

 $r_{it} = 1$ 

 $f_{it} =$ 

C<sub>t</sub> = the adjustment factor for the base date market capitalization

t = the time the index is computed

 $M_t$  = market capitalization of the index at time (t)

B<sub>t</sub> = adjusted base date market capitalization of the index at time (t)

Dividend payments are not taken into account in the price indexes, whereas dividend payments are reinvested in the index constituents of the total return index on a proportional basis.

- iii) Divisor Adjustments. Corporate actions affect the share capital of component stocks and therefore trigger increases or decreases in the index. To avoid distortion, the divisor of the index is adjusted accordingly.
  - \* Formulae for Divisor Adjustment. The following formulae will be used for divisor adjustments. (Note: No divisor adjustments are necessary for stock splits, since market capitalization does not change and the share number and share price are adjusted prior to the opening of trading on the split's ex-date.)

$$\mathbf{D}_{t+1} = \mathbf{D}_{t} \times \frac{\sum \left( \mathbf{p}_{it} \times \mathbf{q}_{it} \times \mathbf{r}_{it} \times \mathbf{f}_{it} \right) \pm \Delta \mathbf{MC}_{t+1}}{\sum \left( \mathbf{p}_{it} \times \mathbf{q}_{it} \times \mathbf{r}_{it} \times \mathbf{f}_{it} \right)}$$

Where:

D, = divisor at time (t)

 $D_{t+1}$  = divisor at time (t+1)

 $p_{it}$  = stock price of fund i at time (t)

q<sub>ii</sub> = number of shares of fund i at time (t)

 $r_{it} = 1$ 

 $f_{it} = 1$ 

 $\Delta MC_{t+1}$ 

= add new components' market capitalization and adjusted market capitalization (calculated with adjusted closing prices and shares effective at time t+1 and/or minus market capitalization of funds to be deleted (calculated with closing prices and shares at time t)

Note: If the current trading price of an issue is unavailable, the previous trading session's closing price is used. However, if the issue is affected by any corporate action that requires an adjustment, then the adjusted price is used.

- \* Adjustments for Corporate Actions. An index divisor may decrease (▼) or increase (▲) or keep constant (■) when corporate actions occur for a component stock. Assuming shareholders receive "B" new shares for every "A" share held for the following corporate actions:
  - ▼ A) CASH DIVIDEND (applied for return index only) adjusted price = closing price dividend announced by the fund
  - ▼ B) SPECIAL CASH DIVIDEND (applied for price and return index) adjusted price = closing price dividend announced by the fund
  - C) SPLIT AND REVERSE SPLIT adjusted price = closing price \* A / B new number of shares = old number of shares \* B / A
  - D) RIGHTS OFFERING adjusted price = (closing price \* A + subscription price \* B) / (A + B) new number of shares = old number of shares \* (A + B) / A
  - E) STOCK DIVIDEND adjusted price = closing price \* A / (A + B) new number of shares = old number of shares \* (A + B) / A
  - ▼F) STOCK DIVIDEND OF A DIFFERENT FUND SECURITY adjusted price = (closing price \* A price of the different fund security \* B) / A

▼G) RETURN OF CAPITAL AND SHARE CONSOLIDATION adjusted price = (closing price - dividend announced by fund) \* A / B new number of shares = old number of shares \* B / A

#### ▼H) REPURCHASE SHARES-SELF TENDER

adjusted price = [(price before tender \* old number of shares) - (tender price \* number of tendered shares)] / (old number of shares - number of tendered shares)

new number of shares = old number of shares - number of tendered shares

# ▲ I) COMBINATION STOCK DISTRIBUTION (DIVIDEND OR SPLIT) AND RIGHTS OFFERING

Shareholders receive B new shares from the distribution and C new shares from the rights offering for every A shares held:

- \* If rights are applicable after stock distribution (one action applicable to other). adjusted price = [closing price \* A + subscription price \* C \* (1 + B / A)]/[(A + B) \* (1 + C / A)] new number of shares = old number of shares \* [(A + B) \* (1 + C / A)]/A
- \* If stock distribution is applicable after rights (one action applicable to other). adjusted price = [closing price \* A + subscription price \* C] / [(A + C) \* (1 + B / A)] new number of shares = old number of shares \* [ ( A + C ) \* ( 1 + B / A) ]
- $\blacktriangle$  J) STOCK DISTRIBUTION AND RIGHTS (NEITHER ACTION IS APPLICABLE TO THE OTHER) adjusted price = [closing price \* A + subscription price \* C] / [A + B + C] new number of shares = old number of shares \* [A + B + C]
- iv) Computational Precision. Index values are rounded to two decimal places and divisors are rounded to integers. Any values derived by the index calculation engine from a corporate action used for the divisor adjustments and index computations are rounded to seven decimal places.

# XII. Data Correction Policy

To maintain a high standard of data integrity, a series of procedures have been implemented to ensure accuracy, timeliness and consistency. Input prices are monitored using a variety of computerized range-check warning systems for both ticker-plant and real-time index systems. Fault tolerant methods are employed in the collection of market and corporate action data. Various verification and audit tasks are performed to ensure the quality of the real-time data feeds and related market data. While every effort is taken to ensure the accuracy of the information used for the index calculation, an index error may occur due to incorrect or missing data, including trading prices, exchange rates, shares outstanding and corporate actions, due to operational errors or other reasons.

i) Intraday Corrections. Reasonable efforts are employed to prevent erroneous data from affecting the indexes. Corrections will be made for bad prices and incorrect or missing corporate actions as soon as possible after detection.

- ii) Since the indexes are calculated on a real-time basis, an incorrect index value tick will not be fixed retroactively. Incorrect daily high/low index values will be corrected as soon as practicable.
- iii) Index-Related Data and Divisor Corrections. Incorrect pricing and corporate action data for individual issues in the database will be corrected upon detection. In addition, an incorrect divisor of an index, if discovered within five days of its occurrence, will always be fixed on the day it is discovered to prevent an error from being carried forward.
- iv) If a divisor error is discovered more than five days after occurrence, the adjustment will depend upon how significant the error is, how far back the error occurred and the feasibility of performing the adjustment.

#### XIII. Review Schedule

Constituent Changes Frequency: Quarterly

Effective date: The first business day of each calendar quarter

Advance notice: Approximately 2 weeks

Quarterly Review Frequency: Quarterly

Effective date: The first business day of each calendar quarter

Advance notice: At least two business days

News Notification\* Frequency: As needed

Effective date: As announced

Advance notice: At least two business days whenever possible

- \* Includes events such as de-listings, mergers, bankruptcies and other extraordinary events.
- \* Based on available news.