

INDEX RULE BOOK

Ned Davis Research CMG US Large Cap Long/Flat Index

Version 1-2
Effective from 1 November 2019
www.ndr.com

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1. Index Summary

Full Name	Ned Davis Research CMG US Large Cap Long/Flat Index (“Index”)		
Index Type	Price Return (NCLFPR) Gross Total Return (NDRCMGLF) Net Total Return (NCLFNTR)		
Eligible Underlying Indices	S&P 500 Index (SPX) or Solactive 13-week U.S. T-bill Index (SOL13TBI)		
Number of invested instruments	Either (1) the S&P 500 Index or Solactive 13-week U.S. T-bill Index, or both indexes (2)		
Weighting	Allocation between S&P 500 and U.S. Treasury bills, dependent on underlying index model level and direction		
Review of Composition	Daily – Based on signals		
Effective Date of the Rebalance	Index rebalances two (2) full trading days from the market close of the day the new signal is published by the indexer.		
Calculation Frequency	15 seconds during U.S. Trading Hours (9:30 – 4:00 P.M. EST)		
Index	Base Date	Base Level	Launch Date
Gross Total Return (NDRCMGLF)	February 15, 1995	10000	December 27, 2016
Net Total Return (NCLFNTR)	December 31, 1998	10000	December 27, 2016
Price Return (NCLFPR)	February 15, 1995	10000	December 27, 2016

2. Governance and Disclaimer

Indexer

Ned Davis Research, Inc. is the Index Provider of the index. The Index Provider is responsible for the day-to-day management of the index and is also responsible for decisions regarding the interpretation of those rules. Standard and Poor’s Inc. is the index calculator.

Cases not covered in rules

In cases which are not expressly covered in these rules, operational adjustments will take place along the lines of the aim of the index. Operational adjustments may also take place if, in the

opinion of the Indexer it is desirable to do so in the best interests of the investors in products based on the index and/or the proper functioning of the markets.

Rule Book Changes

These rules may be supplemented, amended in whole or in part, revised or withdrawn. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the index is compiled or calculated or affect the index in another way.

Liability

Ned Davis Research is not liable for any losses resulting from supplementing, amending, revising or withdrawing the index.

The Indexer will do everything within its power to ensure the accuracy of the composition, calculation, publication and adjustment of the index in accordance with relevant rules. However, Ned Davis Research is not liable for any inaccuracy in share prices, calculations and the publication of the index, the information used for making adjustments to the index and the actual adjustments.

3. Publication

The opening, intraday and closing or daily publication of index values:

Opening

The first index level is calculated and published around 09:30 ET. The calculation of that level utilizes the most updated prices of the traded index. In the case of an eligible index that have a non-traded, halted or suspended status, or have not opened for the current day, the same rules the Standard and Poor's applies to their calculation are applied.

(<https://us.spindices.com/indices/equity/sp-500>)

Dissemination frequency

The level of the index is in principle published every 15 seconds to Chicago Mercantile Exchange (CME). The calculated index levels incorporate the latest traded price of the invested index, either the S&P 500 Index or the Solactive 13-week T-bill index, or a weighted combination.

The index is calculated from 09:30 until 18:00 ET on those days specified as index business days. Index business days will be classified as days on which the U.S. Equity Markets (NYSE, NASDAQ, NYSE MKT) are open for trading, although, this definition could be expanded in the future to include days that are designated as U.S. market holidays.

Closing Level

The closing level is the last level disseminated on the trading day and uses the official close price of the invested index. In the case of exceptional market conditions, the Indexer reserves the right to utilize other prices in the calculation of the official closing level.

Sources of data

Standard and Poor's is the primary market data source for U.S. equity real-time and closing prices. Solactive is the primary market data source for the U.S. T-bill real time and closing prices.

Announcement policy

Changes to the index methodology will be announced by an index announcement, which will be distributed via the Web site of Ned Davis Research Inc.

As a general rule the announcement periods that are mentioned below will be applied. However, urgently required corporate action treatments, often resulting from late notices from the relevant company or exchange, may require the Compiler to deviate from the standard timing.

Rule changes

Barring exceptional circumstances, a period of at least two months should pass between the date a proposed change is published and the date it goes into effect. Exceptions can be made if the change is immaterial and not in conflict with the interests of an affected party, which specifically includes external parties that license the index for a tracking product.

Reviews: publication of new selection

The new composition of the index, will be available on the Ned Davis Research Inc. Web site (www.ndr.com) at least two full trading days before the effective date of any allocation composition changes.

4. Calculation

Calculation of the Solactive 13-Week T-Bill Index

The SOL13TBI index holds an actual fixed income instrument, using the end of day bid price. For the selection of the cash-equivalent instrument, the index will invest in 13-week T-bills with a known termination date and thus the roll will be known ahead of time. When rolling from one 13-week T-bill to another 13-week T-bill, each T-bill security has a unique CUSIP assigned with its issuance date, which would be the *Thursday before the 3rd Friday of every quarter*. The maturity date of the current T-bill is the issue date of the next T-bill. SOL13TBI would only ever hold a maximum of five (5) T-bill security tickers in a calendar year with this methodology, and each of the 13-week T-bills will be held to maturity every quarter. This is because the 13-week T-bills used will only be the most recent end-of-quarter maturity

date, and is defined as commencing *each Thursday before the 3rd Friday of every quarter-end month*. For example, purposes only, see the following rebalance schedule, coinciding with the T-bill's issue and maturity dates: (<https://www.solactive.com/bond-indexing/?index=DE000SLA2DR7>)

Sample 13-Week T-Bill Schedule:

- Issue date 12/17/2015: 13-week T-bill CUSIP 1 (matures 03/17/2016) = **Q1 2016**
- Issue date 3/17/2016: 13-week T-bill CUSIP 2 (matures 6/16/2016) = **Q2 2016**
- Issue date 6/16/2016: 13-week T-bill CUSIP 3 (matures 9/15/2016) = **Q3 2016**
- Issue date 9/15/2016: 13-week T-bill CUSIP 4 (matures 12/15/2016) = **Q4 2016**
- Issue date 12/17/2016: 13-week T-bill CUSIP 5 (matures 03/16/2017) = **Q1 2017**

Calculation of the Price Index

The Index is calculated on a Price Return, Gross Total Return and Net Total Return basis. The current index level will be calculated based on the combination of the S&P 500 Index (SPX) and the 13-week T-Bill Index (SOL13TBI). The Index is always allocated 100% to the SPX and/or the SOL13TBI.

Currency conversion

The index is calculated and published in USD.

5. Index Reviews

Index Universe

The Index is comprised of the S&P 500 Index (SPX) and Solactive 13-Week T-Bill Index (SOL13TBI). At any point in time, the allocation is in the SPX or the SOL13TBI, or a weighed combination of the two, and will match the respective rules and index values of the SPX or SOL13TBI when at 100%. Maximum equity weight is 100% and minimum weight is 0%.

Weight updates and Rebalancing

NDR will provide the associated weight allocations for the SPX or SOL13TBI on a daily basis. The effective date of the rebalance will be two full market days after the index calculator announces the weighting change. The new composition of the index, will be announced at least two trading days before the effective date and sent to the index calculator and posted to Ned Davis Research Inc. website (www.ndr.com).

6. Index Calculation Formula

The index is calculated using the following formula:

$$\text{Index}(t) = \text{Index}(t-1) * (1 + (x_t * (500\text{level}(t)/500\text{level}(t-1) - 1)) + (1 - x_t) * (\text{solactivelevel}(t)/\text{solactivelevel}(t-1) - 1))$$

Where

t = day of calculation

500level = SPX traded level (Standard and Poor's 500 Index)

Solactivelevel = SOL13TBI traded index level (Solactive 13-Week T-Bill Index)

x = weight applied to S&P 500 index

7. Index Description

The Index is a rules-based index that follows a proprietary model developed by Ned Davis Research, Inc. in conjunction with Capital Management Group, Inc. ("CMG"). The model produces trade signals to dictate the Index's equity allocation ranging from 100% fully invested (*i.e.*, "long") to 100% in cash (*i.e.*, "flat"). When the Index is long, or 100% fully invested, the Index will be allocated to the S&P 500 Index. When the Index is flat, or 100% cash, it will be allocated to the Solactive 13-week U.S. T-bill Index. When the Index is not completely long or flat, 50% of it will be allocated to the S&P 500 Index with the remaining allocated portion (50%) to the Solactive 13-week U.S. T-bill Index.

The model produces daily trade signals to determine the Index's equity allocation percentage through a two-phase process.

The first phase produces an industry-level market breadth composite based on the S&P 500 industry groupings. As such, "market breadth" here refers to the ratio of advancing and declining industries, as measured by two types of priced-based, industry-level indicators: trend-following and mean-reversion. Trend-following primary indicators include momentum and various moving average measures to assess the current direction of the markets. Mean-reversion secondary indicators are then applied, which are based on the theory that prices and returns eventually move back towards their historical mean (or average). The model applies these primary and secondary indicators across the S&P 500 industry groupings to ultimately produce trade signals that are either bullish (meaning prices increasing over time) or bearish (meaning prices decreasing over time). The trade signals factor in both the direction and magnitude of these indicators' trends.

The final market breadth composite is the scaled aggregation of these indicators across the S&P 500 industries to determine the breadth composite score (between 0 and 100).

The second phase utilizes the breadth composite score and direction of the market breadth composite described above to produce the equity allocations for the Index. The breadth composite score is divided into two (2) zones (or ranges), which represent bearish market breadth and momentum at the lower levels or bullish market breadth and momentum at the higher levels: I) below 50, II) at or above 50. The breadth composite's direction is determined by the difference between the current value of the breadth composite and the current value of a 21-day simple moving average of the breadth composite.

The equity allocation percentage for the Index based on this two-phase process is summarized as follows:

Breadth Composite Score	Breadth Composite Direction	S&P Allocation Percentage
At or Above 50	N/A	100%
Below 50	Up	50%
	Down	0%

The model incorporates a one (1) day confirmation requirement for new signals: a change in signal must be confirmed by a second, consecutive signal the following market day to activate the signal change.

The model is automated and updates daily to take into account the various indicators that dictate the trade signals referenced above. As such, the Index will rebalance to new allocation percentages intra month when trade signals change based on the model's breadth composite score and direction. When the model produces a 50% S&P equity allocation percentage signal, the Index is rebalanced accordingly at that time. From that point, the Index allocations may drift above or below 50%, until the model produces a new trade signal. There is no allocation drift when the Index's equity allocation is 0% or 100%.

8. Index Review Committee

Each quarter the Review Committee will review the model framework and algorithm for the index. The process will include:

- 1) Presentation of indicator attribution analysis and indicator performance, identifying any:
 - a. systemic change in the underlying data and
 - b. attribution for the associated indicator
- 2) Performance review of overall strategy
- 3) Model framework review
- 4) A review of any issues that impacted the model or update process

Additionally, upon any significant allocation change of the model, members of Review Committee will check and evaluate the accuracy of the signal change.

The Index Review Committee may amend the rules and methodology from time to time as it deems appropriate based on a rigorous evaluation of the data and indicators, including the attribution performance of the indicators and overall strategy, provided that it will publish all of the changes publicly at least five (5) trading days prior to implementation. No change will occur to the model without official sign off from a quorum of committee members' approval.

The Index Review Committee includes member from NDR research and product teams.