

# **Ryan/NASDAQ U.S. 1-30 Year Treasury Laddered Index Methodology**

## **Index Description**

The Ryan/NASDAQ U.S. 1-30 Year Treasury Laddered Index (Symbol: MRTSYA) is comprised of 30 distinct annual U.S. Treasury-auctioned maturities from 1 to 30 years.

## **Index Calculation**

The Ryan/NASDAQ U.S. 1-30 Year Treasury Laddered Index is an equal weighted index. Each maturity from 1 to 30 years is equally weighted annually. However, when a bond is not available for a given year, the Index will overweight bonds before and after the missing year(s) to create an average of the vacant bond(s). In time, as new U.S. Treasury auctions produce bonds for the vacant year(s), the new bond (s) will be entered into the Index and reduce the overweighted bond(s). The Index began on February 28, 2006 at a base value 100.

## **Pricing**

All securities in the Index are priced at the mid-price (between bid and ask prices) this includes additions and existing Index Securities.

## **Accrued Interest**

The day count conversions are based on SIA standards for US Treasury securities:

Actual days of accrued interest / Actual days in the year

## **Daily Total Return**

$[(\text{End Price} + \text{End Accrued} + \text{Coupon Payment}) / (\text{Begin Price} + \text{Begin Accrued}) - 1] * 100$

## **Index Levels**

The index level rises or falls as daily total returns become available. The daily total returns, which include the price return and the income return, are reinvested and compounded back into each index on a geometric or multiplicative basis:

$\text{Previous Index Level} \times (1 + \text{Daily Return} / 100) = \text{Current Index Level}$

## **Dissemination**

The Index is calculated and disseminated once, at the end of day. The index value will be delivered prior to 18:30 Eastern Time (ET) in USD, Monday through Friday, where FINRA recognizes a bond trading day.

## **Eligibility**

Index eligibility is limited to specific security types only. The security types eligible for the Index includes U.S. Treasury-auctioned issues with fixed coupon rates that are non-callable.

## **Eligibility Criteria**

A February maturity is selected for each annual maturity. If more than one February issue is available, the most liquid issue will be selected based upon market conditions. If no February maturity exists, then the most liquid issue closest to that February maturity will be

selected with a maximum deviation of six months. As a bond matures, its proceeds will be reinvested in a 30-year maturity bond so that there will be a continuous maturity "laddered" portfolio of approximately 30 securities, meaning that securities holdings are scheduled to mature in a proportional, annual sequential pattern.

### **Index Evaluation**

The Index Securities are evaluated annually in February. The above Eligibility Criteria are applied using market data up to the rebalancing date in February. Securities meeting the criteria are included in the Index. Security additions and deletions are made effective after the close of trading on the date of rebalancing (generally the middle of February).

Additionally, if at any time during the year other than the Evaluation or Rebalancing date, an Index Security no longer meets the Eligibility Criteria, or is otherwise determined to have become ineligible for inclusion in the Index, the security is removed from the Index and is replaced. In all cases, a security is removed from the Index at its mid-price (between bid and ask prices).

### **Index Maintenance**

If the United States Federal Government issues a new Treasury security, this security will be reviewed as an addition to the February annual maturity ladder. If this security is added, then the annual maturities are over-weighted and/or under-weighted to represent a missing annual maturity issue.

### **Index Rebalancing**

The Index is rebalanced annually in February or whenever the new Treasury auction issue is a better fit for an annual maturity. The Index employs an equal weighting of each Treasury issue to create a maturity ladder from 1 to 30 years.

The exception is if no issue is available for that maturity, the index is allowed to overweight the next shorter or longer maturity. All other issues will be equally weighted.

Nasdaq may, from time to time, exercise reasonable discretion as it deems appropriate in order to ensure Index integrity.

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