# M RNINGSTAR®

## Construction Rules for Morningstar<sup>®</sup> Canada Dividend Target 30 Index<sup>™</sup>

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### Index Characteristics

#### **Overview**

The Morningstar Canada Dividend Target 30 Index (the "Index") is an index reflecting the performance of 30 dividend paying Canadian based equities. The constituents are selected from a universe comprised of constituents trading on the Toronto Stock Exchange (the "TSX") and are classified as Canadian securities by Morningstar (each a "Security" and collectively the "Securities". The Index is reconstituted and rebalanced quarterly and positions are equally weighted. The following index construction rules are intended to represent the options for investment in portfolio of high quality dividend paying equities.

#### **Inception Dates and Base Market Values**

The inception date of the Index is December 31, 2001. Daily price and total return series are available from this date forward. The Index base market value at inception is 1,000.

#### **Calculation and Dissemination of Index Values**

Price return index values are disseminated electronically at 15-second intervals during regular trading hours, and disseminated over the Börse Stuttgart tape. Daily and monthly price and total return index values are distributed via various data distribution channels and are available on <a href="http://indexes.morningstar.com">http://indexes.morningstar.com</a>.

#### **Trading Holidays**

The Morningstar Canada Dividend Target 30 Index is not calculated when the Toronto Stock Exchange is closed.

#### **Index Value Currencies**

The closing values of the Index are calculated in Canadian Dollars, and U.S. Dollars using an average of Reuters bid and ask price.

#### **Scheduled Reconstitution Dates**

The Index is reconstituted—i.e., the Index membership is reset—four times annually. Adjustments are made at the close of trade on the third Friday of March, June, September, and December. The changes become effective on the next business day.

#### **Scheduled Rebalancing Dates**

The weighting of each Security are adjusted—four times annually. Adjustments are made on the Monday following the third Friday of March, June, September, and December. If the Monday is not a business day, then rebalance occurs on the next business day.



There will be two variations of the Index. One variation will have same-day reconstitution and the other variation will have a 5-day reconstitution. For the second variation, reconstitution and rebalancing adjustments may are made over five exchange trading days following the third Friday of March, June, September, and December. In this case, 20% of each reconstitution will be performed each day. The reconstitution starts with Friday's close data.

#### **Morningstar Index Committee**

The Morningstar Index Committee consists of Morningstar's Index Groups following leaders: Head of Business Unit, Head of Operations, and Head of Product Development.

### Assigning Stocks to the Morningstar Canada Dividend Target 30 Index Overview

At each reconstitution date, the investable universe and index eligibility are defined based on the criteria described in this section. The investable universe and index eligibility criteria are applied in the sequence in which they appear below. Each criterion is applied only to the "survivors" of the criteria applied previously.

#### **Investable Universe**

To qualify for inclusion in the investable universe, a Security must meet the following criteria:

- 1) It must be listed on a Principal Exchange such as the TSX
- 2) It must be one of the 100 stocks with the highest 12-month average trading volume and Expected Dividend Yield greater than 1%
- Only Securities of firms that are domiciled in Canada and who have Common Shares or Units of Income Trusts qualify for inclusion in the Index

#### **Index Eligibility**

To be included in the Index, a Security must have an average monthly volume (12 month) greater than \$200 million or the average daily volume (3 month of such Security must be greater than \$10 million.

#### **Index Selection**

At each reconstitution, Securities in the investable universe are assigned a Weighted Average Fundamental Factor Rank (the "WAFFR") based on their weighted average rank of the following five fundamental factors (see Appendix A for fundamental factor definitions):

Fundamental Factor	Strategy Weight
Expected Dividend Yield	33.33%
Cash Flow to Debt	20%
5 Year Normal EPS Growth	13.33%
Return on Equity	20%
EPS Estimate Revision	13.33%



The WAFFR for each Security is determined on each rebalance date by Morningstar as follows. For each fundamental factor relative rankings for all stocks are calculated where Securities with the best possible value will be given a score of 100 while the Securities that have the worst possible value will be given a score of 0. This score out of 100 is multiplied by the assigned strategy weight and repeated for each variable that has been assigned a weight. A total score is then tabulated for all Securities. The Securities with the highest score will be ranked 1 while the stock with the lowest total score receives the worst rank.

Once the Securities are scored by their respected fundamental factors Securities meeting the Index eligibility are selected to the Index in the following manner:

- Rank order of Security by their WAFFR
- Current constituents meeting all the following criteria are retained in the Index:
  - Ranks in the top 75 by their WAFFR
  - Has an Expected Dividend Yield greater than 1.25%
- Additional securities are added to the Index in order of WAFFR until the Index consists of 30 constituents provided that they have meet all of the following conditions:
  - Have an Expected Dividend Yield of 2%
  - Rank amongst the top 75 by WAFFR
  - o Do not exceed a cap of 8 Securities per GICS sector

### Index Calculations

#### **Basic Formula**

The value (price) and total return of the Index is calculated using Laspeyres' formula.

$$Index(t) = \frac{\sum_{i=1}^{n} (p_i(t)^* s_i(t))}{C(t) \sum_{j=1}^{n} (p_j(0)^* s_j(0))} *BaseIndexValue = (M(t)/B(t))*BaseIndexValue$$

The above formulas can be simplified as:

Index(t) =  $\frac{M(t)}{D(t)}$ 

Where:

D(t)	=	divisor at time (t)=B(t)/Base Index Value
n	=	number of securities in the Index
p <sub>i</sub> (0)	=	closing price of securities i at the base date
s <sub>i</sub> (0)	=	constructed securities of company i at the base
p <sub>i</sub> (t)	=	price of securities i at time (t)
s <sub>i</sub> (t)	=	constructed securities of company i at time (t)
C(t)	=	adjustment factor for the base date market capitalization
t	=	time the Index is calculated
M(t)	=	market capitalization of the Index at time (t)
B(t)	=	adjusted base date market capitalization of the Index at time (t)

It is important to note that the shares  $(s_i(t))$  for the Index constituents are artificial constructs used for calculation purposes. Consequently, the constructed shares only have relation to the actual shares of the company in terms of the current market price/fair value relationship.



### Index Calculations (Cont.)

#### **Constructed Shares and Constituent Weighting**

The Index is rebalanced on a quarterly basis. The data used to determine new weightings in the Index is as of the last business day of the month prior to the effective date of the rebalancing. The Index is an equal weight index.

An Index constituents weighting in the Index is determined by:

$$IW_i(q) = \frac{1}{n}$$

And the constructed shares  $(s_i(t))$  for each constituent in the Index calculation formula are determined as follows:

$$s_{i}(t) = \frac{\sum_{j=1}^{n} (s_{j}(t-1)p_{j}(t-1)^{*}IW_{i}(q))}{p_{i}(t-1)}$$

Where:

n	=	number of securities in the Index		
(q)	=	quarter end time the weightings of the constituents in the Index are calculated		
(t)	=	time the Index is calculated		
p <sub>i</sub> (t)	=	price of securities i at time (t)		
lW <sub>i</sub> (q)	=	company weight in Index i at quarterly rebalancing time q		
fp(q)	=	Morningstar Fair Value Price of company i at time (t)		
ts(q)	=	Total outstanding shares of company i at time (q)		
s <sub>i</sub> (t-1)	=	constructed shares of company i at time t minus 1*		
f <sub>i</sub> (q)	=	free float factor of company i at time (q)		

\* At time of inception of the Index, the constructed shares are determined by an arbitrary portfolio value, \$10 Billion.



### Index Calculations (Cont.)

#### **Divisor Adjustments**

To avoid distortions caused by corporate actions that affect the share capital of Index constituents, the divisor of the Index is adjusted accordingly. The following formulae will be used for divisor adjustments due to corporate action.

$$D(t+1) = D(t)^{*} \frac{\sum_{i=1}^{n} (p_i(t)^{*}s_i(t)) + [\Delta MV(t+1)]}{\sum_{i=1}^{n} (p_i(t)^{*}s_i(t))}$$

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.

Where:		
D(t)	=	divisor at time (t)
D(t+1)	=	divisor at time (t+1)
p <sub>i</sub> (t)	=	stock price of company i at time (t)
s <sub>i</sub> (t)	=	number of shares of company i at time (t)
$\Delta MV(t+1)$	=	aggregate change in market value resulting from corporate actions

Most but not all of the following actions will require the calculation of an adjustment factor which will be included in the after-market-close index calculation on the previous business day described above in the section titled "Basic Formula." Generally, because the Index is not market cap weighted changes to the share capital structure of Index constituents will not affect the component weights.



### Corporate Action Adjustments

#### Spin-Offs

Issuers spun off by Index constituents (parent company) are not added to the Index but will be considered for inclusion at the next reconstitution. The weight of the parent company is reduced by a factor of the spin-off conversion ratio that is the weight is a product of the original shares and the new price. A divisor adjustment is made to account for the reduction in market value.

#### **Mergers and Acquisitions**

If an Index constituent acquires or merges with another issuer of a Security in the Index, the affected Securities are replaced by the Security of the successor entity. The weight of the new Security is equal to the market value sum of the affected Securities prior to the completion of such merger or acquisition.

If an Index constituent acquires or merges with issuer of a Security that is currently not a component of the Index, then the affected Security is replaced by the security of the successor entity. The weighting of the successor entity in the Index is equal to the market value of the affected Security. A divisor adjustment is not necessary because the index market value remains unchanged.

If an Index constituent is acquired or merged by an entity that is not an Index component, the affected Index constituent is removed from the Index. A divisor adjustment is made to reflect the decrease in market value.

#### **Stock Dividends / Splits**

Stock splits and dividends do not require a divisor adjustment because the market value of the entity remains unchanged.

#### **Share Repurchase / Offering**

If an Index constituent issues or repurchases shares, the new share capital structure is considered at the next rebalancing date.

#### **Delisting, Bankruptcy, and Financial Distress**

If an Index constituent is delisted by its principal exchange (i.e. the TSX), enters bankruptcy proceedings, or is determined to be under financial distress by the Morningstar Index Committee, the Security is removed from the Index. Exceptions are made on a case-by-case basis. For example, a Security might not be removed immediately when a bankruptcy filing is



not a result of operating or financial difficulties. Upon deletion, a divisor adjustment is made to reflect the decrease in market value.

#### **Change of Principal Exchange**

A Security is removed from the Index if its principal exchange ceases to be the TSX. A divisor adjustment is made to reflect the decrease in market value.

#### **Change of Domicile**

If a company ceases to meet the company domicile eligibility rule, the company is removed from the Index. The domicile of the company must be Canada. A divisor adjustment is made to reflect the decrease in market value.

#### **Loss of Liquidity**

If a constituent accumulates 10 consecutive non-trading days between reconstitution dates, it is removed from the Index. Two business days' prior notice of its removal is provided. A divisor adjustment is made to reflect the decrease in market value.



### Data Corrections and Precision

#### **Index-Related Data and Divisor Corrections**

Incorrect pricing and corporate action data for individual issues in the database will be corrected upon detection. Corrections are limited to 2 hours after close.

#### **Computational and Reporting Precision**

All calculated and adjusted data are stored in real numbers. For reporting purposes, Index values are rounded to two decimal places and divisors are rounded to appropriate decimal places.

#### **Undocumented Events**

Any matter arising from undocumented events will be resolved at the discretion of the Morningstar Index Committee.



### Appendix A: Morningstar Variable Descriptions

#### **Average Daily Trading Volume**

The average daily trading volume is a measure of the liquidity of an issuer's shares or units, as applicable. It is calculated by taking a security's daily trading volume for the past quarter and calculating the arithmetic average.

#### **Cash Flow-to-Debt**

Cash Flow-to-Debt is a measure of a company's excess earnings available to debt holders. Cash Flow is a measure of earnings after expenses and taxes. Cash flows are essential to the solvency of a corporation. Debt is the sum of the short-term and long-term debt securities of a company.

#### **Expected Dividend Yield**

Expected Dividend Yield is a measure of the dividends that a company is expected to pay each year. It is calculated by dividing the annual dividends per share by the current price per share where the annual dividends per share are equal to the product of the most recent dividend paid time the payment frequency.

#### **EPS Estimate Revision**

3-month EPS estimate revision measures the percentage change over the past 3 months in the median broker earnings estimate for a company's current fiscal year. For example, an estimate revision of 15% means that current year earnings estimates have been raised by 15% over the past 3 months. High values are considered best for ranking purposes.

#### **Return on Equity**

Return on Equity is a measure of the income generated by the equity contributed by shareholders. It is calculated by dividing the net income by shareholder's equity.

#### **5-Year Normal EPS Growth**

Earnings-Per-Share ("EPS") is a measure of a company's earnings spread over the shares of a company's outstanding equity. The 5-Year Normal EPS Growth is a historical metric that reflects the EPS growth over a five year period.

