

# **Enhanced Dividend Covered Call Strategy Indices *Methodology***

July 2024

# Table of Contents

|  |           |
|--|-----------|
| Introduction   | 3         |
| <b>Index Objective</b>   | <b>3</b>  |
| <b>Index Family</b>  | <b>3</b>  |
| <b>Supporting Documents</b>  | <b>3</b>  |
| Index Construction   | 5         |
| <b>S&amp;P 500 Dividend Aristocrats Enhanced Covered Call Index</b>          | <b>5</b>  |
| <b>S&amp;P 500 Dividend Aristocrats Covered Call (7.2% Premium) Index</b>    | <b>7</b>  |
| <b>Dow Jones Industrial Average Target 10 Income Index</b>                   | <b>11</b> |
| <b>Dow Jones U.S. Dividend 100 Covered Call Indices</b>                      | <b>14</b> |
| <b>S&amp;P/TSX Canadian Dividend Aristocrats Enhanced Covered Call Index</b> | <b>16</b> |
| Index Data   | 19        |
| <b>Currency of Calculation and Additional Index Return Series</b>            | <b>19</b> |
| <b>Base Date and History Availability</b>                                    | <b>19</b> |
| Index Governance   | 20        |
| <b>Index Committee</b>   | <b>20</b> |
| Index Policy   | 21        |
| <b>Announcements</b>   | <b>21</b> |
| <b>Holiday Schedule</b>  | <b>21</b> |
| <b>Unexpected Exchange Closures</b>  | <b>21</b> |
| <b>Recalculation Policy</b>  | <b>21</b> |
| <b>Contact Information</b>   | <b>21</b> |
| Index Dissemination  | 22        |
| <b>Tickers</b>   | <b>22</b> |
| <b>Index Data</b>  | <b>22</b> |
| <b>Web site</b>  | <b>22</b> |
| Appendix A   | 23        |
| Appendix B   | 25        |
| <b>Methodology Changes</b>   | <b>25</b> |
| Appendix C   | 26        |
| <b>ESG Disclosures</b>   | <b>26</b> |
| Disclaimer   | 27        |
| <b>Performance Disclosure/Back-Tested Data</b>                               | <b>27</b> |

**Intellectual Property Notices/Disclaimer**  
**ESG Indices Disclaimer**

**28**  
**30**

# Introduction

## Index Objective

The Enhanced Dividend Covered Call Strategy Indices measure the performance of a long position in an underlying index and a short position in monthly call options.

## Index Family

**S&P 500 Dividend Aristocrats Enhanced Covered Call Index.** The index measures the performance of a long position in the S&P 500 Dividend Aristocrats Net Total Return Index and a short position in a standard S&P 500 monthly call option. The index targets an annual yield from the option premium.

**S&P 500 Dividend Aristocrats Covered Call (7.2% Premium) Index.** The index measures the performance of a rolling long position in the S&P 500 Dividend Aristocrats Net Total Return Index and a short position in a standard S&P 500 monthly call option.

**Dow Jones Industrial Average Target 10 Income Index.** The index tracks the performance of a hypothetical covered call strategy on the 10 highest dividend yield constituents of the Dow Jones Industrial Average (DJIA). The index targets an annual yield that is approximately 8% above the annual dividend yield of the DJIA by assigning equal weight to 10 selected constituents on a quarterly basis and writing weekly call options on each of them.

**Dow Jones U.S. Dividend 100 Covered Call Indices.** The indices measure the performance of a long position in the Dow Jones U.S. Dividend 100 Index (TR) and a short position in a standard listed S&P 500 monthly call option. Each index targets an index-specific annual yield from the option premium.

**S&P/TSX Canadian Dividend Aristocrats Enhanced Covered Call Index.** The index measures the performance of a long position in the S&P/TSX Canadian Dividend Aristocrats Total Return Index and a short position in a standard S&P/TSX 60 Index monthly call option. The index targets an annual yield from the option premium.

*For Corporate Action events that impact underlying stocks for option contracts, please see Appendix A.*

*For information on underlying indices, please see the index methodologies available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

## 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' Equity Indices Policies & Practices Methodology    | <a href="#">Equity Indices Policies &amp; Practices</a>              |
| S&P Dow Jones Indices' Index Mathematics Methodology                      | <a href="#">Index Mathematics Methodology</a>                        |
| S&P Dow Jones Indices' Options Indices Policies and Practices Methodology | <a href="#">Options Indices Policies &amp; Practices 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.

# Index Construction

## S&P 500 Dividend Aristocrats Enhanced Covered Call Index

The index targets an annual 3.35% yield from the option premium. The short position in the call option initiates on the third Friday of each month (a "Roll Day", day  $t$ ) and held to maturity. The target strike price for the call option is 1% above the S&P 500 closing price on day  $t-1$ . The index selects the next-month contract with a strike price at or immediately above the target strike price. Using the last bid price of the option (on day  $t-1$ ), the notional amount of the short call option component is estimated as a fraction (coverage ratio) of the long S&P 500 Dividend Aristocrats Index component notional amount. Effectively, 1% out-of-the-money calls are written on a portion of the equity notional in order to approximately satisfy the target yield.

The call option settles to the S&P 500 Special Opening Quotation (SOQ) on maturity and a new option is sold at the close on the same day. There is no short call position between settlement and close on the maturity date. The long S&P 500 Dividend Aristocrats Index component is not a perfect hedge for the short S&P 500 call position.

## Total Return Index Calculation

On any business day  $t$ , the index calculates as follows and is floored at zero:

$$Index_t = \text{Max}(0, Equity_t - Call_t + Cash_t) \quad (1)$$

where:

$Equity_t$  = Value of the position in S&P 500 Dividend Aristocrats Net Total Return Index, as defined in (2a) and (2b)

$Call_t$  = Value of the short call position, as defined in (3a) and (3b)

$Cash_t$  = Value of the cash balance, as defined in (4a) and (4b)

### If $t$ is not a Roll Day

The value of the equity, short call and cash balance calculates as follows:

$$Equity_t = Equity_{t-1} * \frac{SPDAUDN_t}{SPDAUDN_{t-1}} \quad (2a)$$

$$Call_t = N_t * Mid_t \quad (3a)$$

$$Cash_t = Cash_{t-1} \quad (4a)$$

where:

$SPDAUDN_t$  = The S&P 500 Dividend Aristocrats Net Total Return Index level as of day  $t$

$N_t$  = Number of the short call option at the end of the current business day, as defined in (5a) and (5b)

$Mid_t$  = Mid price of the short call option at the end of the business day  $t$

$Mid_t = \sum (\text{Bid}_t + \text{Ask}_t) / 2$

The number and the strike ( $K_i$ ) of the short call remain the same.

$$N_t = N_{t-1} \quad (5a)$$

$$K_t = K_{t-1} \quad (6a)$$

If t is a Roll Day

The value of the equity, short call and cash balance calculates as follows:

$$Equity_t = Equity_{t-1} * \frac{SPDAUDN_t}{SPDAUDN_{t-1}} - N_{t-1} * \max(0, SOQ_t - K_{t-1}) + Cash_{t-1} \quad (2b)$$

$$Call_t = N_t * Mid_t \quad (3b)$$

$$Cash_t = N_t * Bid_t \quad (4b)$$

where:

$SOQ_t$  = the Special Opening Quotation as of the Roll Day t

The number of new call option is determined by the index value and the S&P 500 closing on t-1:

$$N_t = Cr_{t-1} * \frac{Index_{t-1}}{SPX_{t-1}} \quad (5b)$$

where:

$$Cr_{t-1} = \min(0.5, Tp_{t-1}/Ap_{t-1} )$$

$$Tp_{t-1} = 3.35\%$$

$$Ap_{t-1} = 12 * \frac{Bid(new)_{t-1}}{SPX_{t-1}}$$

$Tp_{t-1}$  = Target premium yield

$Ap_{t-1}$  = Actual premium yield from writing the new calls on 100% of the equity notional

$Cr_{t-1}$  = Coverage ratio, i.e. fraction of the equity notional

$Bid(new)_{t-1}$  = Bid price of the newly selected call option

The strike of the new call option ( $K_t$ ) is the one at or immediately above the target strike, calculated as follows:

$$K_t \geq (1 + m) * SPX_{t-1} \quad (6b)$$

where m = 1%.

The cash received on the preceding roll date is reinvested into equity on the current roll date. If a monthly Roll Day occurs on a U.S. market holiday, the Roll Day changes to one day prior and the process otherwise occurs in the same way.

## S&P 500 Dividend Aristocrats Covered Call (7.2% Premium) Index

The short position in the call option is initiated on the third Friday of each month (a "Roll Day") and held to maturity. The prior-day S&P 500 index level is multiplied by 0.006 (60 bps) to determine the required bid of the new call option. The next-month contract with the highest strike and with a bid price greater than or equal to this required bid is selected. The long S&P 500 Dividend Aristocrats Index component and the short call option component are held in equal notional amounts. Once the strike price has been identified, the new call option is added at the last bid price of the day. The value of the option premium at the time the new call option is sold is then compounded using the SOFR Overnight + 0.02963% rate, and the index distributes the accrued value on the "Distribution Day," which is defined as the following Roll Day that occurs in the months of March, June, September, and December. The call option settles to the S&P 500 Special Opening Quotation (SOQ) on maturity and a new option is sold at the close on the same day. There is no short call position between settlement and close on the maturity date.

### Excess Return Index Calculation

On any business day  $t$ , the index calculates as follows and is floored at zero:

$$Index_t = \text{Max} (0, Equity_t - Call_t + Cash_t) \quad (1)$$

where:

$Equity_t$  = Notional investment in S&P 500 Dividend Aristocrats Net Total Return Index, as defined in (2a) and (2b)

$Call_t$  = Value of the short call position, as defined in (3a) and (3b)

$Cash_t$  = Value of option premium accrued at the SOFR Overnight + 0.02963% rate and is distributed once a quarter, as defined in (4a) and (4b)

#### If $t$ is not a Roll Day

The value of the equity, short call and accrued option premium calculates as follows:

$$Equity_t = Equity_{t-1} * \frac{SPDAUDN_t}{SPDAUDN_{t-1}} \quad (2a)$$

$$Call_t = N_t * Mid_t \quad (3a)$$

$$Cash_t = Cash_{t-1} * (1 + \frac{ACT_t}{360} * Rate_{t-1}) \quad (4a)$$



where:

- $SPDAUDN_t$  = The S&P 500 Dividend Aristocrats Net Total Return Index level as of day t
- $N_t$  = Number of the short call option at the end of the current business day, as defined in (5a) and (5b)
- $Mid_t$  = Mid price of the short call option at the end of the business day t
- $Mid_t = \sum (Bid_t + Ask_t) / 2$
- $Rate_{t-1}$  = The fixing of SOFR Overnight + 0.02963% rate as of the immediately preceding business day prior to t
- $ACT_t$  = Number of calendar days between t-1 and t

The number and the strike ( $K_t$ ) of the short call remain the same.

$$N_t = N_{t-1} \quad (5a)$$

$$K_t = K_{t-1} \quad (6a)$$

The index has no distribution ( $D_t$ ).

$$D_t = 0 \quad (7a)$$

If t is a Roll Day

The value of the equity, short call and accrued option premium calculates as follows:

$$Equity_t = Equity_{t-1} * \frac{SPDAUDN_t}{SPDAUDN_{t-1}} - N_{t-1} * \max(0, SOQ_t - K_{t-1}) + R_t \quad (2b)$$

$$Call_t = N_t * Mid_t \quad (3b)$$

$$Cash_t = Cash_{t-1} * \left(1 + \frac{ACT_t}{360} * rate_{t-1}\right) + N_t * Bid_t - D_t - R_t \quad (4b)$$

where:

- $SOQ_t$  = The Special Opening Quotation as of the Roll Day t

The number of new call option is determined by the index value and the S&P 500 closing on t-1:

$$N_t = \frac{Index_{t-1} - Cash_{t-1} + R_t}{SPX_{t-1}} \quad (5b)$$

The strike of the new call option ( $K_t$ ) is the *largest* strike that satisfies the following condition:

$$Bid_{t-1} \geq 0.60\% * S\&P\ 500\ Index\ Level_{t-1} \quad (6b)$$

where:

- $Bid_{t-1}$  = Last bid price of the short call option as of the immediately preceding day prior to t

The index distribution is calculated as below:

$$D_t = \begin{cases} 1.8\% * Index_{t-1} & \text{if } t \text{ is a Distribution Day} \\ 0 & \text{otherwise} \end{cases} \quad (7b)$$

The reinvestment amount is calculated as below:

$$R_t = \begin{cases} Cash_{t-1} * \left(1 + \frac{ACT_t}{360} rate_{t-1}\right) - D_t & \text{if } t \text{ is a Distribution Day} \\ 0 & \text{otherwise} \end{cases} \quad (8)$$

If a monthly Roll Day occurs on a U.S. market holiday, the Roll Day changes to one day prior and the process otherwise executes in the same way.

For the avoidance of doubt, the reinvestment amount can be positive or negative.

### Total Return Index Calculation

On any business day t, the index is calculated as follows and is floored at zero:

$$Index_t = \text{Max}(0, Equity_t - Call_t) \quad (9)$$

where:

$Equity_t$  = Notional investment in S&P 500 Dividend Aristocrats Net Total Return Index, as defined in (10a) and (10b)

$Call_t$  = Value of the short call position, as defined in (11a) and (11b)

#### If t is not a Roll Day

The value of the equity, short call and accrued option premium calculates as follows:

$$Equity_t = Equity_{t-1} * \frac{SPDAUDN_t}{SPDAUDN_{t-1}} \quad (10a)$$

$$Call_t = N_t * Mid_t \quad (11a)$$

where:

$SPDAUDN_t$  = The S&P 500 Dividend Aristocrats Net Total Return Index level as of day t

$N_t$  = Number of the short call option at the end of the current business day, as defined in (12a) and (12b)

$Mid_t$  = Mid price of the short call option at the end of the business day t

$Mid_t = \sum (Bid_t + Ask_t) / 2$

$Rate_{t-1}$  = The fixing of SOFR Overnight + 0.02963% rate as of the immediately preceding business day prior to t

$ACT_t$  = Number of calendar days between t-1 and t

The number and the strike ( $K_i$ ) of the short call remain the same.

$$N_t = N_{t-1} \quad (12a)$$

$$K_t = K_{t-1} \quad (13a)$$

#### If t is a Roll Day

The value of the equity, short call and accrued option premium calculates as follows:

$$Equity_t = Equity_{t-1} * \frac{SPDAUDN_t}{SPDAUDN_{t-1}} - N_{t-1} * \max(0, SOQ_t - K_{t-1}) + N_t * Bid_{t-1} \quad (10b)$$

$$Call_t = N_t * Mid_t \quad (11b)$$

where:

$SOQ_t$  = The Special Opening Quotation as of the Roll Day  $t$

The number of new call option is determined by the index value and the S&P 500 closing on  $t-1$ :

$$N_t = \frac{Index_{t-1}}{SPX_{t-1}} \quad (12b)$$

The strike of the new call option ( $K_t$ ) is the *largest* strike that satisfies the following condition:

$$Bid_{t-1} \geq 0.60\% * S\&P\ 500\ Index\ Level_{t-1} \quad (13b)$$

where:

$Bid_{t-1}$  = Last bid price of the short call option as of the immediately preceding day prior to  $t$

If a monthly Roll Day occurs on a U.S. market holiday, the Roll Day changes to one day prior and the process otherwise executes in the same way.

For the avoidance of doubt, the reinvestment amount can be positive or negative.

## Dow Jones Industrial Average Target 10 Income Index

The index selects in January the top 10 highest dividend-yielding stocks from the DJIA over the preceding calendar year. These newly identified stocks become effective constituents of the index after the close on the last Friday of January. The index rebalances quarterly by assigning equal weight to all constituents after the close on the last Friday of January, April, July and October (a “Rebalance Day”).

A short position is initiated in a call option on each constituent stock every Friday (a “Roll Day”, day  $t$ ) and held to maturity. The next-week contract having a strike price nearest to the stock’s closing price on day  $t$  is selected. Using the last bid price of the option (on day  $t$ ), the notional amount of the short call option is estimated as a fraction (coverage ratio) of the long stock notional amount. Effectively, at-the-money calls are written on a portion of the equity notional of each stock in order to approximately satisfy the target yield.

The value of the option premium at the time the new call option is sold is then compounded using the SOFR Overnight + 0.02963% rate, and the accrued cash is reinvested into equity on the last Roll Day of the next month (a “Reinvestment Day”). Each call option settles to the closing price of the underlying stock on maturity, and a new option is sold at the close on the same day. If a weekly Roll Day occurs on a U.S. market holiday, the Roll Day changes to one business day prior and the process will otherwise be executed in the same way.

### Total Return Index Calculation

On any business day  $t$ , the index calculates as:

$$Index_t = \sum_i Level_{i,t} \quad i = 1 \dots 10 \quad (1)$$

where:

$$\begin{aligned} Level_{i,t} &= \max(0, Equity_{i,t} - Call_{i,t} + Cash_{i,t}) \\ Equity_{i,t} &= \text{Notional investment in constituent } i \\ Call_{i,t} &= \text{Value of the short call position in constituent } i \\ Cash_{i,t} &= \text{Value of the cash balance related to constituent } i \end{aligned}$$

If  $t$  is not a Roll Day:

The value of the equity, short call and cash balance calculate as follows:

$$Equity_{i,t} = Equity_{i,t-1} * \frac{P_{i,t} + Div_{i,t}}{P_{i,t-1}} \quad (2a)$$

$$Call_{i,t} = N_{i,t} * Mid_{i,t} \quad (3a)$$

$$Cash_{i,t} = Cash_{i,t-1} * \left(1 + \frac{d_t}{360} * r_{t-1}\right) \quad (4a)$$

where:

$$\begin{aligned} P_{i,t} &= \text{The closing price of constituent } i \text{ on day } t \\ Div_{i,t} &= \text{Dividend received per share of constituent } i \text{ on day } t \\ N_{i,t} &= \text{Number of short call options of constituent } i \text{ at the end of day } t, \text{ adjusted for corporate actions} \\ Mid_{i,t} &= \frac{(Bid_{i,t} + Ask_{i,t})}{2} = \text{mid price of the short call option in constituent } i \text{ at the end of day } t \\ Bid_{i,t} &= \text{Bid price of the short call option in constituent } i \text{ at the end of day } t \\ Ask_{i,t} &= \text{Ask price of the short call option in constituent } i \text{ at the end of day } t \\ d_t &= \text{Number of calendar days between } t - 1 \text{ and } t \\ r_{t-1} &= \text{The fixing of SOFR Overnight + 0.02963\% rate as of day } t - 1 \end{aligned}$$

The number and strike ( $K_{i,t}$ ) of the short call remain the same, after being adjusted for corporate actions.

$$N_{i,t} = N_{i,t-1} \quad (5a)$$

$$K_{i,t} = K_{i,t-1} \quad (6a)$$

If  $t$  is a Roll Day that is neither a Reinvestment Day nor a Rebalance day:

The value of the equity, short call and cash balance calculate as follows:

$$Equity_{i,t} = Equity_{i,t-1} * \frac{P_{i,t} + Div_{i,t}}{P_{i,t-1}} - N_{i,t-1} * \max(0, P_{i,t} - K_{i,t-1}) \quad (2b)$$

$$Call_{i,t} = N_{i,t} * MidNew_{i,t} \quad (3b)$$

$$Cash_{i,t} = Cash_{i,t-1} * \left(1 + \frac{d_t}{360} * r_{t-1}\right) + N_{i,t} * BidNew_{i,t} \quad (4b)$$

Determine the number of new call options as follows:

$$N_{i,t} = Cr_{i,t} * \frac{Equity_{i,t}}{P_{i,t}} \quad (5b)$$

where:

$$Cr_{i,t} = \min\left(1, \frac{T_{i,t}}{A_{i,t}}\right) = \text{coverage ratio, i.e. the fraction of equity notional for constituent } i$$

$$T_{i,t} = Y_t + 8\% - y_{i,t} = \text{target yield for constituent } i$$

$$Y_t = \text{Trailing 1-year dividend yield of DJIA at the end of day } t$$

$$y_{i,t} = \text{Trailing 1-year dividend yield of constituent } i \text{ at the end of day } t$$

$$A_{i,t} = 52 * \frac{BidNew_{i,t}}{P_{i,t}} = \text{yield from writing call options on 100\% of the equity notional for constituent } i$$

$$BidNew_{i,t} = \text{Bid price of the newly selected call option for constituent } i$$

$$MidNew_{i,t} = \text{Mid price of the newly selected call option for constituent } i$$

The strike of the new call option ( $K_{i,t}$ ) is the one nearest to the closing price of stock  $i$  on day  $t$ :

$$K_{i,t} \approx P_{i,t} \quad (6b)$$

If  $t$  is a Roll Day that is also a Reinvestment Day but not a Rebalance day:

The value of the equity, short call and cash balance calculates as follows:

$$Equity_{i,t} = Equity_{i,t-1} * \frac{P_{i,t} + Div_{i,t}}{P_{i,t-1}} - N_{i,t-1} * \max(0, P_{i,t} - K_{i,t-1}) + R_{i,t} \quad (2c)$$

where  $R_{i,t} = Cash_{i,t-1} * \left(1 + \frac{d_t}{360} * r_{t-1}\right)$  is the reinvestment amount.

$$Call_{i,t} = N_{i,t} * MidNew_{i,t} \quad (3c)$$

$$Cash_{i,t} = N_{i,t} * BidNew_{i,t} \quad (4c)$$

Determine the number and strike of the new call options as shown in (5b) and (6b) respectively.

If  $t$  is a Roll Day that is also a Reinvestment Day and a Rebalance day:

The short call position expires, and the rebalanced allocation calculates as follows:

$$Equity_{i,t} = \frac{1}{10} * \sum_i \left( Equity_{i,t-1} * \frac{P_{i,t} + Div_{i,t}}{P_{i,t-1}} - N_{i,t-1} * \max(0, P_{i,t} - K_{i,t-1}) + R_{i,t} \right) \quad (2d)$$

A new short call position is created at the end of the day. The number and strike of the new call options are determined as shown in (5b) and (6b) respectively.

The values of the short call and the cash balance calculate as shown in (3c) and (4c) respectively.

*For information on corporate actions, please refer to Appendix A.*

## Dow Jones U.S. Dividend 100 Covered Call Indices

The short position in the call option initiates on the third Friday of each month (a “Roll Day”, day  $t$ ) and is held to maturity. Select the next-month contract with a strike price at or immediately above the S&P 500 closing price on day  $t - 1$ . Using the last bid price of the option (on day  $t - 1$ ), estimate the notional amount of the short call option component as a fraction (coverage ratio) of the long Dow Jones U.S. Dividend 100 Index component notional amount. Effectively, at-the-money calls are written on a portion of the equity notional in order to approximately satisfy the target yield.

The call option settles to the S&P 500 Special Opening Quotation (SOQ) on maturity and a new call option is sold at the close on the same day. There is no short call position between settlement and close on the maturity date. If a monthly Roll Day occurs on a U.S. market holiday, the Roll Day will be changed to one day prior and the process will otherwise be executed in the same way. The long Dow Jones U.S. Dividend 100 Index component is not a perfect hedge of the short S&P 500 call position.

The index assumes that the option premiums received on a roll day are immediately reinvested into equity.

### Total Return Index Calculation

The index assumes no distribution and does not hold a cash account. On any business day  $t$ , the index calculates as follows and is floored at zero:

$$Index_t = \max(0, Equity_t - Call_t) \quad (1)$$

where

$Equity_t$  = Value of the long position, as defined in (2a) and (2b)

$Call_t$  = Value of the short call position, as defined in (3a) and (3b)

#### If $t$ is not a Roll Day

The value of the equity and short call calculates as follows:

$$Equity_t = Equity_{t-1} * \frac{DJUSDIVT_t}{DJUSDIVT_{t-1}} \quad (2a)$$

$$Call_t = N_t * Mid_t \quad (3a)$$

where

$DJUSDIVT_t$  = The Dow Jones U.S. Dividend 100 Total Return Index level as of day  $t$

$N_t$  = Number of short call options (in shares) at the end of day  $t$ , as defined in (4a) and (4b)

$Mid_t = \frac{Bid_t + Ask_t}{2}$  = Mid price of the short call option at the end of day  $t$

$Bid_t$  = Bid price of the short call option at the end of day  $t$

$Ask_t$  = Ask price of the short call option at the end of day  $t$

The number and the strike ( $K_t$ ) of the short call remain the same.

$$N_t = N_{t-1} \quad (4a)$$

$$K_t = K_{t-1} \quad (5a)$$

#### If $t$ is a Roll Day

The value of the equity and short call, and the number of new call options calculate as follows:

$$Equity_t = Equity_{t-1} * \frac{DJUSDIVT_t}{DJUSDIVT_{i,t-1}} - N_{t-1} * \max(0, SOQ_t - K_{t-1}) + N_t * Bid_t \quad (2b)$$

$$Call_t = N_t * Mid_t \quad (3b)$$

$$N_t = Cr_{t-1} * \frac{Index_{t-1}}{SPX_{t-1}} \quad (4b)$$

where

$SOQ_t$  = The Special Opening Quotation as of the Roll Day  $t$

$SPX_{t-1}$  = Closing level of the S&P 500 on day  $t - 1$

$Cr_{t-1} = \min\left(1, \frac{Tp}{Ap_{t-1}}\right)$  = Coverage ratio, i.e., the fraction of equity notional

$Tp$  = Target annual premium yield

$Ap_{t-1} = 12 * \frac{BidNew_{t-1}}{SPX_{t-1}}$  = Actual premium yield from writing call options on 100% of the equity notional

$BidNew_{t-1}$  = Bid price of the newly selected call option

Select the strike of the new call option ( $K_t$ ) as follows:

$$K_t \geq SPX_{t-1} \quad (5b)$$



## S&P/TSX Canadian Dividend Aristocrats Enhanced Covered Call Index

The index targets an annual 3.35% yield from the option premium. The short position in the call option initiates on the third Friday of each month (a "Roll Day", day  $t$ ) and is held to maturity. The target strike price for the call option is 1% above the TSX60 closing price on day  $t-1$ . The index selects the next-month contract with a strike price at or immediately above the target strike price. Using the last bid price of the option (on day  $t-1$ ), the notional amount of the short call option component is estimated as a fraction (coverage ratio) of the long S&P/TSX Canadian Dividend Aristocrats Index component notional amount. Effectively, 1% out-of-the-money calls are written on a portion of the equity notional in order to approximately satisfy the target yield.

The call option settles to the official settlement price of TSX60 on maturity and a new option is sold at the close on the same day. The long S&P/TSX Canadian Dividend Aristocrats Index component is not a perfect hedge of the short TSX60 call position.

### Total Return Index Calculation

On any business day  $t$ , the index is floored at zero and calculates as follows:

$$Index_t = \text{Max}(0, Equity_t - Call_t + Cash_t) \quad (1)$$

where:

$Equity_t$  = Value of the position in S&P/TSX Canadian Dividend Aristocrats Total Return Index, as defined in (2a) and (2b)

$Call_t$  = Value of the short call position, as defined in (3a) and (3b)

$Cash_t$  = Value of the cash balance, as defined in (4a) and (4b)

#### If $t$ is not a Roll Day

The value of the equity, short call, and cash balance calculate as follows:

$$Equity_t = Equity_{t-1} * \frac{SPTXDVT_t}{SPTXDVT_{t-1}} \quad (2a)$$

$$Call_t = N_t * Mid_t \quad (3a)$$

$$Cash_t = Cash_{t-1} \quad (4a)$$

where:

$SPTXDVT_t$  = The S&P/TSX Canadian Dividend Aristocrats Total Return Index level as of day  $t$

$N_t$  = Number of the short call option at the end of the current business day, as defined in (5a) and (5b)

$Mid_t$  = Mid price of the short call option at the end of the business day  $t$

The number and the strike ( $K_t$ ) of the short call remain the same.

$$N_t = N_{t-1} \quad (5a)$$

$$K_t = K_{t-1} \quad (6a)$$

#### If $t$ is a Roll Day

The value of the equity, short call and cash balance calculate as follows:

$$Equity_t = Equity_{t-1} * \frac{SPTXDVT_t}{SPTXDVT_{t-1}} - N_{t-1} * \max(0, SET_t - K_{t-1}) + Cash_{t-1} \quad (2b)$$

$$Call_t = N_t * Mid_t \quad (3b)$$

$$Cash_t = N_t * (1 - 0.007) * Bid_t \quad (4b)$$

where  $SET_t$  is the official settlement price of TSX60 on the roll day.

The number of new call option is determined by the index value and the TSX60 closing on  $t-1$ :

$$N_t = Cr_{t-1} * \frac{Index_{t-1}}{TSX60_{t-1}} \quad (5b)$$

where:

$$Cr_{t-1} = \min(0.5, Tp_{t-1}/Ap_{t-1})$$

$$Tp_{t-1} = 3.35\%$$

$$Ap_{t-1} = 12 * \frac{BidNext_{t-1}}{TSX60_{t-1}}$$

$$Tp_{t-1} = \text{The target premium}$$

$$Ap_{t-1} = \text{The actual premium from writing calls on 100% of the equity notional}$$

$$Cr_{t-1} = \text{The coverage ratio, capped at 50% of the equity notional}$$

$$BidNext_{t-1} = \text{The bid price of the newly selected call option}$$

The strike of the new call option ( $K_t$ ) is the one at or immediately above the target strike and calculates as follows:

$$K_t \geq (1 + m) * TSX60_{t-1} \quad (6b)$$

where:

$$m = 1\%.$$

If a strike is found to satisfy condition (6b), then the index subtracts a transaction cost of 0.7% from its bid quote ( $QuotedBidNext_{t-1}$ ):

$$BidNext_{t-1} = (1 - 0.007) * QuotedBidNext_{t-1}$$

If no strike is found to satisfy condition (6b) or if the identified strike is found to be more than 2% out-of-the-money, then a synthetic bid price calculates as follows:

1. Calculate a volatility surface using the implied volatilities of all listed TSX60 call options on day  $t$ .
2. By applying interpolation, estimate the implied volatility of the target strike using FINCAD.
3. A synthetic mid price  $SyntheticMidNext_{t-1}$  calculates for the target strike by applying the Black-Scholes formula.

The synthetic bid price then calculates by subtracting 2% to account for bid-mid spread and transaction cost.

$$BidNext_{t-1} = (1 - 0.02) * SyntheticMidNext_{t-1}$$

The cash received on the preceding roll date reinvests into equity on the current roll date.

On the days following the calculation of a synthetic bid price, the index uses the mid-price of a suitable nearby strike with the same target expiration to value the call position. The index selects the suitable strike to be either the nearest higher strike or the nearest lower strike listed on the same day. If neither are available, the index uses the nearest higher/lower strike listed on the previous day.

If a monthly Roll Day occurs on a Canadian market holiday, the Roll Day changes to one day prior, and the process otherwise executes in the same way.

### **Index Maintenance**

On any business day, if  $Mid_t$  is missing due to data feed issues or lack of quotes from the exchange, the index uses the option settlement price  $Stl_t$  in its place, i.e.  $Call_t = N_t * Stl_t$ .

On a roll date:

- If  $Bid_t$  is missing, then use the settlement price to calculate  $Cash_t$  with a transaction cost of 2%, i.e.  $Cash_t = N_t * (1 - 0.02) * Stl_t$ .
- If a strike is found to satisfy condition (6b) but  $QuotedBidNext_{t-1}$  is missing, use  $BidNext_{t-1} = (1 - 0.02) * QuotedStlNext_{t-1}$ .
- If no strike is found to satisfy condition (6b) or if the identified strike is found to be more than 2% out-of-the-money, and if the bid/ask quotes are missing, then calculate the volatility surface using the settlement prices of the options.

For more information on index option pricing, please refer to the TMX website [here](#).

# Index Data

## Pricing

Options prices are provided via vendor feed after market close.

For further information on pricing, please refer to S&P Dow Jones Indices' Options Indices Policies & Practices Methodology.

## Currency of Calculation and Additional Index Return Series

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to [S&P DJI Methodology & Regulatory Status Database](#).

For information on the calculation of different types of indices, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).

## Base Date and History Availability

The index history availability, base date, and base value are shown in the table below.

| Index   | Launch Date | First Value Date | Base Date  | Base Value |
|---|-------------|------------------|------------|------------|
| DJIA Target 10 Income Index                                       | 06/05/2023  | 01/30/2020       | 01/30/2020 | 100        |
| Dow Jones U.S. Dividend 100 3% Premium Covered Call Index         | 04/14/2023  | 01/19/2006       | 01/19/2006 | 100        |
| Dow Jones U.S. Dividend 100 7% Premium Covered Call Index         | 04/14/2023  | 01/19/2006       | 01/19/2006 | 100        |
| Dow Jones U.S. Dividend 100 10% Premium Covered Call Index        | 03/06/2024  | 01/19/2006       | 01/19/2006 | 100        |
| S&P 500 Dividend Aristocrats Enhanced Covered Call Index          | 07/05/2024  | 01/18/2007       | 01/18/2007 | 100        |
| S&P 500 Dividend Aristocrats Covered Call (7.2% Premium) Index    | 04/24/2017  | 01/18/2001       | 01/18/2001 | 100        |
| S&P/TSX Canadian Dividend Aristocrats Enhanced Covered Call Index | 07/05/2024  | 11/19/2015       | 11/19/2015 | 100        |

# Index Governance

## **Index Committee**

An S&P Dow Jones Indices Index Committee maintains the index. All Committee members are full-time professional members of S&P Dow Jones Indices staff. The Index Committee meets regularly. At each meeting, the Index Committee reviews any significant market events. In addition, the Index Committee may revise index policy for timing of rebalancing or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

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' Equity Indices Policies & Practices Methodology and/or Options Indices Policies & Practices Methodology.*

# Index Policy

## **Announcements**

Announcements of the daily index values are made after the market close each day.

## **Holiday Schedule**

Each index calculates daily when the underlying equity index is calculated.

*A complete holiday schedule for the year is available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

## **Unexpected Exchange Closures**

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

## **Recalculation Policy**

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology and Options Indices Policies & Practices Methodology for the underlying indices, respectively.

*For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices and Options Indices Policies & Practices Methodology documents for the underlying indices, respectively.*

## **Contact Information**

For 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 Web site at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/), major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

## 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 Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

| Index   | BBG      | RIC       |
|---|----------|-----------|
| DJIA Target 10 Income Index   | SPDJT10I | .SPDJT10I |
| Dow Jones U.S. Dividend 100 3% Premium Covered Call Index (USD) TR  | SPDJ3DCC | .SPDJ3DCC |
| Dow Jones U.S. Dividend 100 7% Premium Covered Call Index (USD) TR  | SPDJ7DCC | .SPDJ7DCC |
| Dow Jones U.S. Dividend 100 10% Premium Covered Call Index (USD) TR | SPDJ10CC | .SPDJ10CC |
| S&P 500 Dividend Aristocrats Enhanced Covered Call Index (USD) TR   | SPXDECCU | .SPXDECCU |
| S&P 500 Dividend Aristocrats Enhanced Covered Call Index (CAD) TR   | SPXDECCC | .SPXDECCC |
| S&P 500 Dividend Aristocrats Covered Call (7.2% Premium) Index      | SPXDACUN | .SPXDACUN |
| S&P/TSX Canadian Dividend Aristocrats Enhanced Covered Call Index   | SPTXDECC | .SPTXDECC |

## Index Data

Daily constituent and index level data are available via subscription.

For product information, please contact S&P Dow Jones Indices at [www.spglobal.com/spdji/en/contact-us](http://www.spglobal.com/spdji/en/contact-us).

## Web site

For further information, please refer to S&P Dow Jones Indices Web site at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).

# Appendix A

When the terms of an equity option contract have been changed to terms different from its original standardized terms – such as the contract's deliverable (unit of trade) and strike price – the index will adjust those terms to account for this.

The adjusted exercise price is an option contract's strike price after adjustments have been made for corporate actions such as stock splits or special dividends made to its underlying security. Any time changes occur to the securities on which options are written, the strike price and delivery quantity of the underlying security must be adjusted accordingly in order to ensure that neither the long nor short holder of the options are negatively affected.

These changes can include stock splits, reverse stock splits, special dividends, or dividends paid in stock. Strike prices are not adjusted for the payment of ordinary dividends, ticker symbol changes, or due to a merger or acquisition.

## **Stock Split**

A stock split is a corporate action that increases the number of a company's shares, while simultaneously reducing its per share price, such that the market capitalization of the company remains the same before and after the event.

Stock splits are quoted in terms of shares received to shares held. The shares of a company increase (multiply) by the stock split adjustment factor (greater than one), while the price decreases (divides) by this same factor. In a 5-for-1 stock split, the adjustment factor is 5, so the shares outstanding are multiplied by 5 while the price is divided by 5.

Similarly, a stock split increases the number of shares in each option contract and decreases the strike price. Each option contract typically controls 100 shares of an underlying security at a predetermined strike price. The new share ownership is generated by taking the split ratio and multiplying by 100 while the new strike price is generated by taking the old strike price and dividing by the split ratio. For example, if you buy a call option that controls 100 shares of XYZ with a strike price of \$75, and XYZ announces a 2:1 stock split, the contract would then control 200 shares with a strike price of \$37.50.

## **Consolidation / Reverse Split**

A consolidation, also referred to as a reverse split, is the opposite of a stock split. In a consolidation, the shares of a company decrease while its per-share-price increases by the adjustment factor. Also like a stock split, the overall market capitalization of the company remains unchanged. A reverse split also reverses the adjustment process for options. For example, if you buy a call option that controls 100 shares of XYZ with a strike price of \$5, and XYZ announces a 1:5 stock split, the contract then controls 20 shares with a strike price of \$25.

## **Special Dividends**

No adjustments to strike prices are made when an underlying stock pays an ordinary, regular cash dividend. When a firm pays a special dividend that is not paid out on a regular basis, that dividend is subtracted from the stock price, so options strike prices must adjust for that.

If a stock pays out a special cash dividend, then the strike may be reduced by the dividend amount. If a company pays a special stock dividend – that is, it pays shareholders in extra shares instead of in cash – then the strike price must also be reduced by the amount of the dividend's value. Assuming a dividend is special, the value of the dividend must be at least \$12.50 per option contract for an adjustment to be made to the contract.

## **Mergers / Acquisitions**

Between annual reconstitutions, a company can be deleted from the index due to corporate events such as mergers, acquisitions, takeovers or delistings. In such cases, the non-constituent stock from the DJIA with the



highest indicated annual dividend yield (as of the preceding year-end) will be added to the index at a weight equaling the departing weight of the removed company.

Between annual rebalances, if a constituent stock is removed from the DJIA for reasons other than those listed above, it will remain in the index until the next annual reconstitution. Additionally, if a constituent company reduces or suspends its dividend, it will remain in the index until the next annual reconstitution.

### **Spin-offs**

The spin-off is added to the index at a zero price on the ex-date with no divisor adjustment. The spin-off will be dropped from the index on the next roll date with its weight redistributed back to the parent company. The index divisor does not adjust.

# Appendix B

## Methodology Changes

Methodology changes since April 24, 2017, are as follows:

| <b>Change</b>  | <b>Effective Date<br/>(After Close)</b> | <b>Previous</b>     | <b>Methodology<br/>Updated</b> |
|--|---|---------------------|--------------------------------|
| S&P 500 Dividend Aristocrats Covered Call (7.2% Premium) Index:<br><br>USD Interest Rate Replacement | 12/17/2021                              | Overnight USD Libor | SOFR Overnight + 0.02963%      |

# Appendix C

## ESG Disclosures

| <b>EXPLANATION OF HOW ENVIRONMENTAL, SOCIAL &amp; GOVERNANCE (ESG) FACTORS ARE REFLECTED IN THE KEY ELEMENTS OF THE BENCHMARK METHODOLOGY<sup>1</sup></b> |  |   |
|---|--|---|
| 1.  | <b>Name of the benchmark administrator.</b>  | S&P Dow Jones Indices LLC.                                      |
| 2.  | <b>Underlying asset class of the ESG benchmark.<sup>2</sup></b>                            | N/A   |
| 3.  | <b>Name of the S&amp;P Dow Jones Indices benchmark or family of benchmarks.</b>            | <a href="#">S&amp;P DJI Options Indices Benchmark Statement</a> |
| 4.  | <b>Do any of the indices maintained by this methodology take into account ESG factors?</b> | No  |
| <b>Appendix latest update:</b>  |  | January 2021  |
| <b>Appendix first publication:</b>  |  | January 2021  |

<sup>1</sup> The information contained in this Appendix is intended to meet the requirements of the European Union Commission Delegated Regulation (EU) 2020/1817 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the minimum content of the explanation of how environmental, social and governance factors are reflected in the benchmark methodology and the retained EU law in the UK [The Benchmarks (amendment and Transitional Provision) (EU Exit) Regulations 2019].

<sup>2</sup> The 'underlying assets' are defined in European Union Commission Delegated Regulation (EU) 2020/1816 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published.

# Disclaimer

## Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients by providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The methodology and factsheets of any index that employs backward assumption in the back-tested history

will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

### **Intellectual Property Notices/Disclaimer**

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are 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 DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI 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 DJI 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 DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI 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. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading 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 DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI 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" "WHERE IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS 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 DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI's control might necessitate material changes to indices.

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 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 nonpublic 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.

Some indices use the Global Industry Classification Standard (GICS®), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use

thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.

### **ESG Indices Disclaimer**

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy or completeness of such ESG scores, ratings, or data. No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled

objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.