S&P Managed Risk 2.0 Index Series Consultation on Target Volatility and Final Asset Weights

NEW YORK, JANUARY 10, 2022: S&P Dow Jones Indices ("S&P DJI") is conducting a consultation with market participants on potential changes to the S&P Managed Risk 2.0 Index Series.

In order to allow the strategy to adjust the underlying asset weights more efficiently in response to market movements, while taking into account the market and volatility profiles of the respective underlying indices, S&P DJI is proposing to amend the target volatility of the index series. Two options are being considered and are described below:

Option 1: Increase the Target Volatility for the S&P 400, 600, and EM 100 Managed Risk 2.0 Indices.

Target Volatility	
Current	Target Volatility of 22% with a band of 1% for each index in the S&P Managed Risk 2.0 Index Series.
Proposed	Keep the Target Volatility of 22% with a band of 1% for the S&P 500 Managed Risk 2.0 Index and S&P EPAC Ex. Korea LargeMidCap Managed Risk 2.0 Index. Increase the Target Volatility to 30% with a band of 1% for the S&P 400 Managed Risk 2.0 Index, S&P 600 Managed Risk 2.0 Index, and S&P EM 100 Managed Risk 2.0 Index.

Option 2: Replace the Target Volatility Threshold with a new Target Volatility Cap and Floor, and add a Relative Strength Index to determine the Target Volatility moving between the cap and floor.

Target Volatility	
Current	Target Volatility of 22% with a band of 1% for each index in the S&P Managed Risk 2.0 Index Series.
Proposed	Target Volatility Cap of 30% and Target Volatility Floor of 22% for each index in the S&P Managed Risk 2.0 Index Series.

<table>
<tr><th colspan="2">Relative Strength Index</th></tr>
<tr><td>Current</td><td>--</td></tr>
<tr><td>Proposed</td><td>
The Relative Strength Index (RSI) at time *t* is computed using the formula below:

$$RSI_t = \frac{100}{1 + \frac{\overline{r_{-.t}}}{\overline{r_{+.t}}}}$$

where $\overline{r_{+.t}}$ and $\overline{r_{-.t}}$ correspond to the average weekly gains and losses at time t, respectively. These quantities are determined by:

$$\overline{r_{-.t}} = \begin{cases} \lambda_{\bar{r}} \overline{r_{-,t-1}} + (1 - \lambda_{\bar{r}}) * \max\left(1 - \frac{E_t}{E_{t-5}}, 0\right) \ if \ \ T \geq T_0 + 5 \\ 0.01\% \ if \ T_0 \leq T < T_0 + 5 \end{cases}$$

$$\overline{r_{+.t}} = \begin{cases} \lambda_{\bar{r}} \overline{r_{+,t-1}} + (1 - \lambda_{\bar{r}}) * \max\left(\frac{E_t}{E_{t-5}} - 1, 0\right) \ if \ \ T \geq T_0 + 5 \\ 0.01\% \ if \ T_0 \leq T < T_0 + 5 \end{cases}$$

where the decay factor $\lambda_{\bar{r}}$ is given by:

$$\lambda_{\bar{r}} = \begin{cases} 0 \ if \ \ t_{RSI,1/2} = 0 \\ 0.5^{1/t_{RSI,1/2}} \ otherwise \end{cases}$$

where $t_{RSI,1/2}$ is the RSI half life and set to be 35 in the index series.
</td></tr>
</table>

Current Target Variance	
Current	$\sigma_t^2 = \min\left((\sigma+\varepsilon)^2, \max\left((\sigma-\varepsilon)^2, \text{Variance}_{S,t}, \text{Variance}_{L,t}\right)\right)$
Proposed	$\sigma_t^2 = \left[\min\left(\underline{\sigma} + \frac{\max\left((RSI_t - \underline{RSI}),0\right)}{\overline{\text{RSI}} - \underline{\text{RSI}}} * (\overline{\sigma} - \underline{\sigma}), \overline{\sigma}\right)\right]^2$ where: $\overline{RSI}$ is the RSI cap and set to be 70 in the index series. $\underline{RSI}$ is the RSI floor and set to be 30 in the index series. $\overline{\sigma}$ is the target volatility cap and set to be 30% in the index series. $\underline{\sigma}$ is the target volatility floor and set to be 22% in the index series.

Additionally, in order to reduce tracking error when a rebalancing is triggered during a market holiday (thereby preventing the rebalancing from being implemented), S&P DJI is proposing to expand the final asset weights rules to take into account underlying equity index stock exchange holidays. The table below details the proposed change:

Final Asset Weights	
Current	To reduce the number of small trades, the index calculates the difference between the theoretical equity weight and a reference equity weight, and triggers a rebalancing only when the difference is above the Minimum Daily Allocation Change, unless the minimum transaction size is preventing the portfolio from reaching maximum equity exposure.
Proposed	To reduce the number of small trades, the index calculates the difference between the theoretical equity weight and a reference equity weight, and triggers a rebalancing only when the difference is above the Minimum Daily Allocation Change, unless the minimum transaction size is preventing the portfolio from reaching maximum equity exposure. Additionally, a rebalancing is not triggered if there is a trading issue due to underlying equity index stock exchange holidays. A trading issue is when any stock exchange in the underlying equity index is closed for two consecutive days thereby preventing the rebalancing from being implemented. A rebalancing is not triggered if there is trading issue.

For more information on the index series, please refer to the S&P Managed Risk 2.0 Index Series Methodology.

IMPACT ANALYSIS

A full impact analysis for both options of the proposed target volatility change under consideration is available here. This impact analysis includes the actual risk-return characteristics and the hypothetical results that would have occurred had the proposed changes been applied from the respective index first value date to June 30, 2021.

IMPLEMENTATION TIMING

Any changes, if adopted, will be implemented with sufficient advanced notice provided.

QUESTIONS

Please answer the following questions and provide S&P DJI with the reasoning behind your answers:

1. **Which option do you prefer regarding Target Volatility for the S&P Managed Risk 2.0 Index Series?**
    - **Option 1: Increase the Target Volatility for the S&P 400, 600, and EM 100 Managed Risk 2.0 Indices.**

- **Option 2: Replace the Target Volatility Threshold with a new Target Volatility Cap and Floor, and add a Relative Strength Index to determine the Target Volatility moving between the cap and floor.**
- **Option 3: A different option (please specify in Question 3 below).**

2. **Do you agree with the proposal to expand the final asset weights rules to take into account underlying equity index stock exchange holidays?**
3. **Do you have any other comments or feedback regarding the proposed changes outlined above?**

Your participation in this consultation is important as we gather information from various market participants in order to properly evaluate your views and preferences. Please respond to this survey by **February 8, 2022**. After this date, S&P DJI will no longer accept survey responses. Prior to the Index Committee's final review, S&P DJI may request clarifications from respondents as part of that review.

To participate in this consultation, please visit the online survey available here.

For further information about this consultation, please contact S&P Dow Jones Indices at SPDJI_Index_Governance@spglobal.com.

Please be advised that all comments from this consultation will be reviewed and considered before a final decision is made; however, S&P DJI makes no guarantees or is under any obligation to comply with any of the responses. The survey may result in no changes or outcome of any kind. If S&P DJI decides to change the index methodology, an announcement will be posted on our website.

Thank you for taking the time to complete this survey.

For more information about S&P Dow Jones Indices, please visit www.spglobal.com/spdji.

ABOUT S&P DOW JONES INDICES

S&P Dow Jones Indices is the largest global resource for essential index-based concepts, data and research, and home to iconic financial market indicators, such as the S&P 500® and the Dow Jones Industrial Average®. More assets are invested in products based on our indices than products based on indices from any other provider in the world. Since Charles Dow invented the first index in 1884, S&P DJI has been innovating and developing indices across the spectrum of asset classes helping to define the way investors measure and trade the markets.

S&P Dow Jones Indices is a division of S&P Global (NYSE: SPGI), which provides essential intelligence for individuals, companies and governments to make decisions with confidence. For more information, visit www.spglobal.com/spdji.

FOR MORE INFORMATION:

S&P Dow Jones Indices
index_services@spglobal.com