S&P Dow Jones Indices

A Division of **S&P Global**

S&P Risk Control Indices Consultation on EUR Indices Interest Rate Calculation

NEW YORK, AUGUST 31, 2018: S&P Dow Jones Indices ("S&P DJI") is conducting a consultation with members of the investment community on potential changes to the S&P Risk Control Indices calculated in EUR.

Due to the decommissioning of the two-month maturity for the European Money Markets Institute Euro Interbank Offered Rate (EMMI Euribor) effective December 3, 2018, S&P DJI is proposing to modify the calculation formula used in EUR-based Risk Control indices and is offering two proposed solutions related to this change in the availability of interest rates. The table below summarizes the proposed options. Please note that this change will not affect any Risk Control index calculated in other currencies.

Proposed Change Summary	Description
Option 1: Move to simple three-month rate	S&P DJI is proposing to change the interest rate used from an interpolated rate representing a rolling investment in a three-month interest rate to a simple three-month interest rate.
Option 2: Substitute one-month rate into current formula	S&P DJI is proposing to change the interest rate used in the interpolated rate formula to a one-month interest rate.

For more information on risk control index calculations, please refer to the S&P DJI's Index Mathematics Methodology available here.

Below are the updated formulas for each proposed option as they would appear in S&P DJI's Index Mathematics Methodology. The affected items are marked in red.

Option 1: Move to simple three-month rate:

$$Risk\ Control\ Index\ Value_{rb} *$$

$$\left[1+\left[K_{rb}*\left(\frac{Underlying\ Index_t}{Underlying\ Index_{rb}}-1\right)+(1-K_{rb})*\left[\prod_{i=rb+1}^{t}(1+InterestRate_{i-1}*D_{i-1}/360)-1\right]\right]\right]$$

where:

$$InterestRate_{i-1} = (\textcolor{red}{IR3M_{i-1}})$$

Option 2: Substitute one-month rate into current formula:

$$\text{Risk Control Index Value}_t = \text{Risk Control Index Value}_{rb} * \left[1 + \left[K_{rb} * \left(\frac{\text{Underlying Index}_t}{\text{Underlying Index}_{rb}} - 1 \right) + (1 - K_{rb}) * \left[\prod_{i=rb+1}^{t} (1 + \text{InterestRate}_{i-1}) - 1 \right] \right] \right]$$

where:

$$InterestRate_{i-1} = \left(D_{i-1,t} * IR3M_{i-1} - \left(IR3M_{i-1} - IR3M_{i-2} - D_{i-1,t} * (IR3M_{i-1} - \textcolor{red}{IR1M_{i-1}}) * \left(\frac{1}{60}\right) \right) * 90 \right)/360$$

$D_{i-1,t}$	= The number of calendar days between day *i-1* and day *t*
$IR3M_{i-1}$	= Three-month interest rate on day *i-1*
$IR3M_{i-1}$	= One-month interest rate on day *i-1*

QUESTIONS

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

1. **Which of the proposed options to change the interest rate used to calculate S&P Dow Jones Indices Risk Control EUR indices do you agree with?**

   A. **Option 1: change the interest rate used from an interpolated rate representing a rolling investment in a three-month interest rate to a simple three-month interest rate**

   B. **Option 2: change the interest rate used in the interpolated rate formula to a one-month interest rate**

   C. **Neither**

2. **If you do not agree to either of the proposed options, which rate do you prefer to use instead?**

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. S&P DJI will make responses to consultations freely available upon request.[1] If you do not want your response to be made available, you must clearly state that in your response. Please respond to this survey by **October 1, 2018**. After this date, S&P DJI will no longer accept survey responses. Prior to the Index Committee's final review, S&P DJI will consider the issues and may request clarifications from respondents as part of that review. Alternative options to the proposed questions after the deadline require that the consultation be re-opened to the public.

To participate in this consultation, please visit the online survey available [here](#).

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[1] Individual and company names as well as contact details will be redacted.

CONSULTATION

For further information about this consultation, please contact S&P Dow Jones Indices at index_services@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.spdji.com*.

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 become home to over 1,000,000 indices across the spectrum of asset classes that have helped 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.spdji.com*.

FOR MORE INFORMATION:

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CONSULTATION