# Methodology of SSE Dividend Equity and Bond Moderate Allocation Strategy Indices

SSE Dividend Equity and Bond Moderate Allocation Strategy Indices select high dividend stocks and high coupon bonds as underlying assets. Based on a target risk model and in combination with changes in dividend yield, it optimizes asset allocation to achieve a relatively stable risk-adjusted return, providing investors with asset allocation tools featuring different risk and return characteristics.

# 1. Index Name and Index Code

Index Name	Shortened Name	Index Code
SSE Dividend Equity and Bond Moderate Allocation 10% Index	SSE Dividend Equity and Bond Moderate 10%	950350
SSE Dividend Equity and Bond Moderate Allocation 20% Index	SSE Dividend Equity and Bond Moderate 20%	950351
SSE Dividend Equity and Bond Moderate Allocation 30% Index	SSE Dividend Equity and Bond Moderate 30%	950352

## 2. Base Date and Base Value

The base date is June 30, 2017. The base value is 1000.

## 3. Index Eligibility

The indices is comprised of two assets. Each asset is represented by a corresponding index as the following table shows:

Asset Class	Sub-Class Index	Index Code
Stock	SSE Dividend Total Return Index	H00015
Bond	SSE 0-5 Year High Grade Credit Bond Coupon Strategy Index	950317

## 4. Weights Calculations

Firstly, set the target of stock asset weight as  $W_0^1$ , the upper limit of stock asset weight as  $W_{max}^1$  and the target of portfolio volatility  $\sigma_{target}$ , as shown in the table below:



Index shortened name	Target of stock asset weight	Upper limit of stock asset weight	Target of portfolio volatility
SSE Dividend Equity and Bond Moderate 10%	10%	15%	1.5%
SSE Dividend Equity and Bond Moderate 20%	20%	25%	3%
SSE Dividend Equity and Bond Moderate 30%	30%	35%	5%

On any rebalancing day  $t_0$ , the estimated volatility of the portfolio is defined as  $\sigma_0 = \sqrt{w_0^T \sum w_0}$ , where  $w_0$  represents the targets of weight vector and  $\sum$  is the covariance matrix of the portfolio over the past six months. Then, the adjusted weight of the stock asset is calculated as follows:

$$W_{t_0}^1 = \min(W_{max}^1, \quad k \times \frac{\sigma_{target}}{\sigma_0} \times W_0^1)$$

The value of the coefficient k is determined in accordance with the dividend yield sequence of the SSE Dividend Index over the preceding 120 trading days and the historical percentile of the current dividend yield. Specifically, when the dividend yield surpasses the historical 85th percentile, k is set to 1.5; conversely, if the yield falls below the historical 15th percentile, k is adjusted to 0.5. For all other scenarios, k remains at 1.

Then, the adjusted weight of the bond asset is calculated as follows:

$$W_{t_0}^2 = 1 - W_{t_0}^1$$

#### 5. Index Calculations

The index is calculated as the following formula:

$$Index_{t} = Index_{t_{0}} \times \sum_{i=1}^{2} [W_{t_{0}}^{i} \times (1 + Sub - Class Asset Return Rate_{[t_{0},t]}^{i})]$$

Where  $W_{t_0}^i$ , i = 1,2 represent the initial weights of the assets at effective

date of regular adjustment. Sub – Class Asset Return  $\text{Rate}_{[t_0,t]}^i$ , i = 1,2 represent cumulative return rates of the assets from effective date of regular adjustment to any future trading day t. Please refer to CSI Index Calculation and Maintenance Methodology for further details.



#### 6. Constituents and Index Weights

#### 6.1 Constituent's Periodical Review

The index is adjusted and rebalanced semi-annually and the adjustment will be effective as of the 3rd trading day each month.

#### 6.2 Ongoing Review

When special events occur, CSI will review the index accordingly. Please refer to CSI Index Calculation and Maintenance Methodology for further details.