

Methodology of SSE STAR Growth Momentum 50 Strategy Custom Index

SSE STAR Growth Momentum 50 Strategy Custom Index selects 50 securities with higher growth rates of operating revenue and favorable historical momentum performance in the past year from STAR market as constituents. The index is to measure the performance of securities of listed companies with growth characteristics and momentum effect of STAR market.

1. Index Name and Index Code

Index Name: SSE STAR Growth Momentum 50 Strategy Custom Index

Shortened Name: STAR Growth Momentum Custom

• Index Code: 950260

2. Base Date and Base Value

The base date is December 31, 2019. The base value is 1000.

3. Index Eligibility

3.1 Index Universe

The index universe includes stocks and CDRs issued by red-chip enterprises listed on SSE Science and Technology Innovation Board satisfying the following conditions.

- (1) The listing time is more than six months. For securities with the daily average total market value since its initial listing ranked top 5 on SSE Science and Technology Innovation Board, the listing time is more than three months.
 - (2) Non -*ST securities.

3.2 Eligible Securities

Liquidity Criteria: securities ranked in the top 90% in the index universe and 80% in the securities listed in SSE in terms of average daily trading value over the last year in descending order are eligible for inclusion.



3.3 Constituents Selection

- (1) Standardize the growth, momentum and consensus sub-indicators¹. Aggregate the sub-indicators into growth, momentum and consensus score in equal weight in respect:
 - Growth: revenue growth rate, accounts receivable and payable growth rate, and SUR.
 - Momentum: 52-week high, 12M-1M momentum, and 12M-1M extra momentum.
 - Consensus: consensus expectation net profit upward revision.
 - (2) Adjust the growth, momentum and consensus score as follows:

$$factor\ score_{indicator} = \begin{cases} -\left[\left(\frac{i-1}{N} - 0.5\right)^2 - \left(\frac{i}{N} - 0.5\right)\right] \times \frac{2N}{M}, if\ \text{indicator}\ \text{score} \neq 0.5\\ 0, if\ \text{indicator}\ \text{score} = 0.5 \end{cases}$$

where M is the number of securities meeting liquidity screening criteria, N is the number of securities for which the indicator score is not 0.5, and i represents the sorted rank of the factor scores for securities with valid factor scores in ascending order.

Calculate the scores of growth, momentum, and consensus expectation indicators within the securities that meet the investability screening criteria.

- (3) Calculate the composite factor score and free-float market capitalization score, where composite factor score composite factor score and the free-float market capitalization score is calculated as the percentage of the free float market capitalization of securities meeting the criteria for investability among screened securities.
- (4) Rank the eligible securities by total score in descending order, where total score is the sum of the composite factor score and free-float market capitalization score, and select top 50 securities as constituents.

4. Index Weights and Calculations

$$score \ of \ sub_indicators = \begin{cases} 1 - \frac{rank - 1}{number \ of \ securities \ in \ the \ universe - 1}, if \ sub_indicators \ not \ null \\ 0.5, \ \ if \ sub_indicators \ null \end{cases}$$

¹ Standardize the sub-indicators as follows:

The index is calculated according to the following formula:

Current Index = Current Total Adjusted Market-Cap / Divisor × Base Value

Where Current Total Adjusted Market-Cap = Σ (Security Price × Number of Free Float Adjusted Shares × Weight Factor)

For the calculation of number of free float adjusted shares, please refer to CSI Index Calculation and Maintenance Methodology for further details. The value of Weight Factor is between 0 and 1, which is calculated at each rebalancing date, so that the weight is calcuted with the following formula, and the weight of each constituent is capped at 15%, and the total weight of constituents largest 5 constituents is capped at 60%.

$$\label{eq:weight(security_i)} \begin{aligned} & \text{weight(security_i)} \\ &= \begin{cases} & \text{total score}_i \text{, if composite factor score}_i \leq 0 \\ & \text{total score}_i + \frac{(1-W)\text{composite factor score}_i}{\sum \text{composite factor score}_i} \text{, if composite factor score}_i > 0 \\ \end{aligned}$$

where W is the sum of total score of the constituents.

5. Constituents and Index Weights Adjustment

5.1 Constituent's Periodical Review

The index is adjusted and rebalanced quarterly and the adjustment will be effective as of the next trading day after the 2nd Friday in March, June, September and December.

Weight Factor is assigned to each constituent at each rebalancing date. The effective date is the same as that of the constituent adjustment. The Weight Factor stays the same until next rebalancing date.

5.2 Ongoing Review

When special events occur, CSI will review the index accordingly. Delisted securities will be deleted from the constituents. Please refer to Index Calculation and Maintenance Methodology for further details.