

TIP Customized Taiwan High Dividend Recovery 30 Index

I. Introduction

TIP Customized Taiwan High Dividend Recovery 30 Index is designed to measure the performance of stocks with dividend yields and recovery ability. The index universe is composed of top 150 stocks that are listed in TWSE and TPEx. TIP screens the companies that meet the liquidity, financial criteria, and dividend yields. Considering the ratio of stock price successful recover after the ex-dividend date, top 30 companies are finalized and weighted primarily according to the dividend yields and further adjusted based on the free float market capitalization.

II. Calculation and Management

1. The index types of the TIP Customized Taiwan High Dividend Recovery 30 Index include the “Price Index” and the “Total Return Index”, which are maintained and managed by TIP. Taiwan Stock Exchange (TWSE) is designated to carry out the real-time calculation and dissemination.
2. TIP conducts periodic reviews of constituents according to the index rules.
3. TIP retains the closing market capitalization records of all constituents.
4. Refer to the “[General Principles for TIP Securities Indices](#)” for the principles of index development, maintenance, and management.

III. Eligibility of Constituents

1. Sampling Universe:
 - A. Index Universe: Common stocks listed on the TWSE and the TPEx, excluding managed stocks, emerging stocks, and stocks with altered trading methods or suspended from trading; however, those suspended from trading due to corporate actions, including but not limited to capital reduction, conversion to holding company, exchange of shares into the shares of newly established companies or change of par value may still be included in the Index Universe.
 - B. Sampling Range: The 150 stocks with the largest market capitalization in the Index Universe.
2. Criteria of Constituent Selection:
 - A. Liquidity test:

A stock that meets any of the following criteria shall be deemed to pass the liquidity test.

 - a. The top 20% of stocks ranked by total trading value in the most recent twelve

calendar months.

- b. The free float turnover ratio reaches 3% for at least 8 months in the last 12 calendar months.

B. Index Screening:

The sum of the operating profits in the last four quarters is positive.

C. Sorting methods:

- a. The stocks in the top 33% of **Dividend Rate** are selected as qualified stocks. The **Dividend Rate** is calculated as follows:

$$\frac{\text{sum of EPS in the last 4 quarters} \times \text{average cash dividend payout ratio in the last 3 years}}{\text{stock price on the data cut - off date}}$$

- b. The top 30 stocks are selected as constituents from among the qualified stocks sorted by the dividend recovery frequency in the last 15 times in descending order.¹

3. Weighting Method:

- A. The basic weight of each individual constituent is determined via its **Dividend Rate**, then adjusted by the free float adjusted market capitalization.

- B. The basic weight is determined by:

$$\begin{aligned} \text{basic weight}_i &= \text{dividend weight}_i + \text{free float adjusted market capitalization adjusted weight}_i \\ &= \text{dividend weight}_i + \text{factor intensity} \times \text{factor weight} \times \text{adjusted ratio}_i \end{aligned}$$

factor intensity: 100% ;

factor weight: 20%

adjusted ratio_i: Calculated based on the relative strength of the free float adjusted market capitalization of constituent *i*.

- C. Constituents weights shall not exceed 8%, that calculated by the basic weight.
- D. Constituents weights shall not exceed 5 times of the proportion of free float market capitalization. If it is not possible to achieve the target weight allocation under this constraint, the multiplier limit may be gradually relaxed; however, no constituent's weight may exceed 8%.

IV. Index Calculation

1. Index Calculation Frequency:

¹ The qualified stocks must have ex-dividend data more than 3 times for sorting; while the ranks are the same, constituents are selected in descending order of dividend rate and free float adjusted market capitalization. If the number of stocks is less than 30, the threshold for qualified stocks will be relaxed in steps of 5%, up to a maximum of 50%.

- A. Starting July 4, 2022, the real-time TIP Customized Taiwan High Dividend Recovery 30 Index is calculated and disseminated every five seconds during the trading hours of the TWSE and the TPEx, based on the latest trading prices of the constituent stocks. The end-of-day (EOD) index is calculated once a day after the market closes.
- B. TIP also compiles the TIP Customized Taiwan High Dividend Recovery 30 Total Return Index, which adjusts the TIP Customized Taiwan High Dividend Recovery 30 Index after considering the cash dividend factor, in order to reflect cash dividend-included returns. The index is calculated and disseminated once every day after the market closes.

2. Calculation Formula:

- A. TIP Customized Taiwan High Dividend Recovery 30 Index as a “Price Index”:

$$Index = \frac{Total\ Index\ Market\ Values}{Index\ Divisor} \times base\ value$$

$$Index_t = \frac{\sum_{i=1}^n cp_{i,t} \times s_{i,t} \times p_{i,t}}{Divisor_t} \times 5000$$

$cp_{i,t} \times s_{i,t} \times p_{i,t}$ = “index market value” of constituent i on day t

n = number of index constituents

$p_{i,t}$ = trading price of constituent i on day t

$s_{i,t}$ = number of issued shares of constituent i on day t

$cp_{i,t}$ = the adjustment coefficient of constituent i on day t is decided in accordance with the “SmartBeta Investment Index Category” described in the [“TIP Corporate Actions and Events Methodology.”](#)

$Divisor$ = index divisor of Price Index; after the market closes, the index divisor is adjusted in accordance with the “SmartBeta Investment Index Category” described in the [“TIP Corporate Actions and Events Methodology”](#) to maintain the index continuity. The adjustment method is as follows:

Index divisor = index divisor on the previous day

$$\times \left(\frac{\text{total index market values at the previous day's close} \pm \text{total index market values changes}}{\text{total index market values at the previous day's close}} \right)$$

Note 1: The base date is set on June 2, 2022, and the base index is set at 5000 points.

Note 2: The index divisor on the base date is the total index market values at that time.

$$\sum_{i=1}^n cp_{i,launch} \times s_{i,launch} \times p_{i,launch} , launch = \text{base date}$$

- B. TIP Taiwan Customized Taiwan High Dividend Recovery 30 Total Return Index as a the “Total Return Index”:

$$Index = \frac{Total\ Index\ Market\ Values}{Index\ Divisor} \times base\ value$$

$$Index_t = \frac{\sum_{i=1}^n cp_{i,t} \times s_{i,t} \times p_{i,t}}{DivisorTR_t} \times 5000$$

DivisorTR = index divisor of the Total Return Index; after the market closes, the index divisor is adjusted in accordance with the “SmartBeta Investment Index Category” under the [“TIP Corporate Actions and Events Methodology”](#) to maintain the index continuity. The adjustment method is as follows:

Index divisor = index divisor on the previous day

$$\times \left(\frac{\text{total index market values at the previous day's close} \pm \text{total index market values changes}}{\text{total index market values at the previous day's close}} \right)$$

V. Constituent Adjustment and Index Maintenance

1. Periodic Review and Adjustment of Constituents:

- A. The constituents are reviewed twice a year, with the 17th trading day of June and December as the review dates, and the data cut-off dates are the 10th trading day of June and December². After each periodic review, the number of constituents is fixed at 30.
- B. The results of the constituent periodic review will become effective following a five-trading-day interval after the review date(not included).
- C. For the index divisor maintenance, the closing data of each previous trading day during the rebalancing period is adopted to calculate the difference, which is used as the total index market value changes between the total index market value of the new portfolio and the original one.
- D. If the review data of holding companies or newly established companies is insufficient, and the representative companies of the converted stocks meet the Sampling Universe qualification, the data of the representative companies or their stocks may be used in the review.

2. TIP Customized Taiwan High Dividend Recovery 30 Index belongs to the SmartBeta Investment Index Category. The related maintenance such as the non-periodic adjustment of constituents, the adjustment coefficient, the number of issued shares, and the index divisor is handled in accordance with the [“TIP Corporate Actions and Events Methodology”](#). If a constituent is removed as a result of the above reasons, the vacancy created will not be

² Where otherwise prescribed, such other rules shall apply.

Reference only, the Chinese version shall prevail.

filled.

3. Principles for implementation of the Free Float Coefficient:

- A. If the free float coefficient is lower than 10%, it will not be included in the Sampling Universe.
- B. The update for the free float coefficient shall be in conjunction with the effective date of constituents' periodic review.
- C. The free float coefficient are updated base on the latest data generated from TIP's "[TIP Free Float Coefficient Calculation Guide](#)".