

TIP Customized Taiwan High Dividend 30 Index

I. Introduction

In view of the fact that high dividend investing is well received among passive investors, “TIP Customized Taiwan High Dividend 30 Index” (abbr., the “TIP Taiwan HD30 Index”) aims to regularly select high dividend stocks and participate in their dividend payments allocations, so as to increase the dividend revenue of the index constituents. The weights of constituents are given primarily according to the dividend yields and further adjusted based on the free float market capitalization. The index is developed to represent the performance of investing in both high dividend stocks and high payments participation.

II. Calculation and Management

1. The index types of TIP Taiwan HD30 Index include the “Price Index” and the “Total Return Index”, which are maintained and managed by the 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 method or suspended from trading; however, those suspended from trading due to corporate actions, including but not limited to, capital reduction, conversion to holding companies, 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: Top 200 stocks by market capitalization, following the exclusion of the Taiwan Innovation Board (TIB) stocks from the Index Universe.

2. Criteria of Constituent Selection:

A. Liquidity Test:

The average daily trading value for the most recent trailing 3 months are ranked in descending order. The top 90% stocks that pass the liquidity criteria are included in the "Qualified List".

B. Index Screening:

a. The first and second annual review:

- i. Total operating profit for the most recent trailing 4 quarters is positive.
- ii. Stocks with ex-dividend date earlier than effective date and cash dividends paid once a year are excluded.

b. The third annual review: Total operating profit for the most recent trailing 4 quarters is positive.

C. Sorting Method:

a. The first annual review:

- i. Stocks that declared annual cash dividend distribution approved or proposed by the board of directors. "Dividend yield" shall be calculated as follows:

$$\frac{\text{total cash dividend for the most recent trailing 4 quarters}}{\text{stock price at the data cut-off date}}$$

"Dividend yield" for the rest of stocks shall be calculated as follows:

$$\frac{\text{total EPS for the most recent trailing 4 quarters} \times \text{average cash dividend payout ratio for the most recent trailing 3 years}}{\text{stock price at the data cut-off date}}$$

- ii. After index screening, stocks with announced ex-dividend date that is after effective date and before the effective date of the second annual review, and its "dividend yield" is in the top 50% of the "Qualified List". The top 30 stocks will be selected in descending order by "dividend yield".
- iii. If there are less than 30 constituents after the above process, non-constituents which passed index screening, and previous ex-dividend dates occurred between April 15th and July 15th more than twice for the most recent trailing 3 year, and its "dividend yield" is in the top 50% of the "Qualified List" will

be selected in descending order by “dividend yield” until the 30 constituents are selected.

- iv. If there are less than 30 constituents after the above process, non-constituents which passed index screening will be selected in descending order by “dividend yield” until the 30 constituents are selected °

b. The second annual review:

- i. "Dividend yield" shall be calculated as follows:

$$\frac{\text{total cash dividend for the most recent trailing 4 quarters}}{\text{stock price at the data cut-off date}}$$

- ii. The top 30 stocks which passed index screening are selected in descending order by "dividend yield".

c. The third annual review:

- i. "Dividend yield" shall be calculated as follows:

$$\frac{\text{total EPS for the most recent trailing 4 quarters} \times \text{average cash dividend payout ratio for the most recent trailing 3 years}}{\text{stock price at the data cut-off date}}$$

- ii. After index screening, stocks whose cash dividends are paid on a regular basis with frequency more than once a year. The top 30 stocks are selected in descending order by “dividend yield”.
- iii. If there are less than 30 constituents after the above process, existing constituents will be selected in descending order by “dividend yield” until the 30 constituents are selected.

3. Weighting Method:

- 1. The weight of the individual constituent is determined by the dividend yield and then adjusted according to the free float adjusted market capitalization.
- 2. According to the weighting scheme above, the weight of each constituent shall not exceed 5% and the lower limit is 1%.

IV. Index Calculation

1. Index Calculation Frequency:

- A. Starting November 15, 2021, the TIP Taiwan HD30 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 Taiwan HD30 Total Return Index, which adjusts the TIP Taiwan HD30 Index after considering the cash dividend factor, in order to reflect the cash dividend-included return. The index is calculated and disseminated once every day after the market closes.

2. Calculation Formula:

- A. The TIP Taiwan HD30 Index is a "Price Index":

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

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

$cp_{i,t} \times s_{i,t} \times p_{i,t}$ = " 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 the Price Index; after the market close, 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 $\times$

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

Note 1: The base date is set as October 1, 2021, and the base value is set at 5000 points.

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

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

B. The TIP Taiwan HD30 Total Return Index is a "Total Return Index":

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

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

DivisorTR = index divisor of the Total Return Index; after the market close, 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 ×

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

V. Constituent Adjustment and Index Maintenance

1. Periodic Review and Adjustment of Constituents:

- A. The constituents are reviewed three times a year, with the 7th trading day of April, July and December as the review dates, and the data cut-off date is the last trading day of March, June and November. After each periodic review, the number of constituents is fixed at 30.
- B. Constituents replacement limit: For the third annual review, the maximum replacement of 6 stocks is applied.
- C. The results of the constituent periodic review will become effective following a five-trading-day interval after the review date(not included). The index is rebalanced over 5 consecutive trading days starting from the review effective date (the rebalancing period). A

transitional weight is allocated to each security in the index during the rebalancing period.

- D. 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.
 - E. 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 Taiwan HD30 Index is a 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 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 of the free float coefficient shall be in conjunction with the effective date of constituents periodic review.
 - C. The free float coefficients are updated based on the latest data generated from TIP's "[TIP Free Float Coefficient Calculation Guide](#)".