

# CSI 300 Index Methodology

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# 1. Preface

CSI300 is composed of 300 securities with the largest market capitalization and liquidity from the entire universe of listed companies in China. Launched on April 8, 2005, the index is to measure the performance of the securities traded on Shanghai Stock Exchange and Shenzhen Stock Exchange.

# 2. Index Universe

The index universe of CSI300 includes all the Non-ST and \*ST securities and CDRs issued by red-chip enterprises listed at Shanghai Stock Exchange and Shenzhen Stock Exchange satisfying the following conditions:

- Science and Technology Innovation Board securities and ChiNext Board securities: The listing time of a security is more than 1 year;
- Other securities: The listing time of a security is more than three months unless the daily average total market value of a security since its initial listing is ranked top 30.

# 3. Selection Criteria

CSI300 index constituents are selected as follows and the candidate constituents should have good performance without serious financial problems or violation of laws and regulations and with no large price volatility that shows strong evidence of market manipulation:

- Rank the securities in the universe by average daily trading value over the past year in descending order and delete the bottom 50% securities;
- Rank the rest securities by average daily total market capitalization over the past year in descending order and select the top 300 securities as the constituents.

# 4. Index Calculation

CSI300 is calculated by points, which will be rounded up to 3 decimal places.

#### 4.1 Base Date and Base Value

The base date is December 31, 2004. The base value is 1000.

#### 4.2 Index Calculation Formula

The index is calculated according to the following formula:

$$Current Index = \frac{Current Total Adjusted MarketCap}{Divisior} \times Base Value$$

Where Current Total Adjusted Market-Cap =  $\Sigma$  (Security Price × Number of Free Float Adjusted Shares)

CSI300 uses category-weighted method to adjust the shares of constituents. Hence, the calculation of the number of the adjusted shares of constituents depends on two factors, namely free float and category-weighted method. The detailed contents of category-weighted method and free float could be found in Rule 4.5 and 4.4, respectively.

When changes occur to constituent list or the share structure, or constituents' market value changes due to non-trading factors, according to the index constituents' maintenance methodology, the "Divisor Adjustment Methodology" is used to adjust the original divisor to keep comparable overtime.

Details see Rule 5 "Index Maintenance".

#### 4.3 Index Real-time Calculation

The real-time calculation of CSI300 is based on the real-time price data released by the quotes systems of Shanghai Stock Exchange and Shenzhen Stock Exchange.

The practical operations are as follows. During exchange trading hours, the index is calculated by the real-time quotations published by the exchange (If there is no transaction, the reference opening price provided by the exchange quotation system or the reference opening price maintained by CSI), and published real time. Price of each constituent (X) is defined by the following principles:

If there is no deal on the whole trading day, X equals to the reference opening price. Otherwise, X equals to the latest traded price.

CSI will decide whether to continue to calculate the indices or not in case of abnormal quotations from Shanghai Stock Exchange and Shenzhen Stock Exchange.

#### 4.4 Free Float

To reflect the variation of the real negotiable shares in the market, CSI300 adopts the definition of free float shares (free float) in index calculation, which excludes the restricted shares and the non-negotiable shares due to strategic holdings or other reasons from the total shares of listed companies. The remaining shares available for trading shall be deemed as free-float shares.

(1) Long term holdings by founders, families, and senior executives, etc.

- (2) State-owned shares
- (3) Strategic holdings
- (4) Employee share plans

For shares clearly announced as restricted by listed companies and shares that fall into the 4 types of shares as above, if the holding is 5% or greater by a shareholder or shareholders acting in concert, such shares shall be deemed as non-free float shares.

Free Float = Total shares of constituent - non-free float shares

CSI estimates free float based on various objective available information.

#### 4.5 Category-Weighted Method

The calculation of CSI300 Index uses category-weighted method in which CSI will grant certain inclusion factor to the total securities of the share class according to the percentage of free float shares in total securities of the constituent to ensure the stability of the index.

Free Float Ratio = Free Float / Total Shares of Constituent

Adjusted Shares = Total Shares of Constituent × Inclusion Factor

Inclusion factor of the constituents of CSI300 shall be determined according to the chart below:

Negotiable Market Cap Ratio (%)	≤15	(15, 20]	(20, 30]	(30, 40]	(40, 50]	(50, 60]	(60, 70]	(70, 80]	>80
Inclusion Factor (%)	nearest higher percentage point	20	30	40	50	60	70	80	100

#### [Category-Weighted Chart of the CSI Equity indexes]



Security	Security A	Security B	Security C	
Total A Shares	100,000	8,000	5,000	
Non-Free Float	91,000	4,500	900	
Free Float	0.000	2 500	4 100	
= Total A Shares – Non-Free Float	9,000	3,500	4,100	
Negotiable Market Cap Ratio	9.0%	43.8%	82.0%	
= Free Float / Total A Shares	9.0%	43.8%	82.0%	
Inclusion Factor	9%	50%	100%	
Inclusion Shares	9000	4000	5000	

#### 4.6 Total Return Index and Net Total Return Index

CSI calculates daily closing data of CSI300 total return index and CSI300 net total return index to satisfy investors' needs.

CSI300 total return index and CSI300 net total return index are derived indexes from CSI300 Index. The calculation of total return index and net total return index takes the reinvestment income of constituents before-tax and after-tax cash dividends into consideration, which enables investors to measure index performance from different aspects.

CSI300 total return index and CSI300 net total return index are calculated according to the following formula:

CSI300 total return index (CSI300 TRI):

 $TRI_{t} = TRIClosingData_{t-1} \times \frac{\sum (Closing Price_{t} \times Number of Free Float Adjusted Shares_{t} \times FX_{t})}{\sum (Reference Opening Price_{t} \times Number of Free Float Adjusted Shares_{t} \times FX_{t-1})}$ 

T represents any trading day, T-1 represents the last trading day before T day. The reference opening price is adjusted according to the corporate events (such as Cash Dividend).

 $NTRI_{t} = NTRI Closing Data_{t-1} \times \frac{\sum (Closing Price_{t} \times Number of Free Float Adjusted Shares_{t} \times FX_{t})}{\sum (Cleference Opening Net Price_{t} \times Number of Free Float Adjusted Shares_{t} \times FX_{t-1})}$ 

T day represents any trading day, T-1 represents the last trading day before T day. The reference opening net price is adjusted of the reference opening price according to the corporate events (such as Cash Dividend), the tax rate used for index calculation is 10%.

The difference between the total return index, the net total return index and the price index is on the treatment of cash dividend. When the constituent company distributes cash dividends, the total return index and net total return index shall not fall naturally.

## 5. Index Maintenance

In the event of a change in constituent list or a capital change in the index constituents, or constituents' market value fluctuates due to non-trading factors, the divisor is adjusted to prevent the discontinuities in the index. That is, CSI300 adopts the "Divisor Adjustment Methodology" to adjust the old divisor according to index constituents maintenance methodology.

#### 5.1 Formula of Divisor Adjustment Methodology

Adjusted Market Cap before Adjustment	_ Adjusted Market Cap after Adjustment
Old Divisor	New Divisor

Adjusted Market Cap after Adjustment = Adjusted Market Cap before Adjustment + Adjusted Market Cap increased or decreased

The new divisor derived from this formula shall be used for the future index calculation.

#### 5.2 Circumstances for Index Adjustment

#### 5.2.1 Corporate events that may affect the price of constituents

- Ex-Dividend: For CSI300 index, no index shall be adjusted in the event of an ex-dividend (dividend payment), and its natural fall shall not be interfered. CSI300 total return index and CSI net total return index are adjusted based on the reference ex-dividend price before the ex-dividend date.
- Ex-Right: If the bonus issue, rights issues, security split and security consolidation occurs, the index shall be adjusted the day before the issuance. Calculation of Adjusted Market Cap is based on new shares and prices.

Adjusted Market Cap after Adjustment = Ex-right Price × Adjusted No. of Shares + Adjusted Market Cap before Adjustment (excluding securities adjusted for bonus issue, rights issues, security split and security consolidation)

#### 5.2.2 Other corporate events that affect the index constituents

In the event that the aggregated change in the total shares of constituents due to other corporate actions (e.g. secondary offering, debt-to-equity swap and exercise of warrants) reaches or exceeds 5%, the index is subject to temporary adjustment and shall be adjusted before the capital change in the index constituents.

Adjusted Market Cap after Adjustment = Closing Price× Adjusted Sharers after Changes

□ If the accumulated change in the total shares of constituents is less than 5%, the index

is subject to regular adjustment and shall be adjusted before the Effective Date of regular adjustment.

#### 5.2.3 Constituents adjustment

□ Index shall be adjusted before the Effective Date of regular adjustment or temporary adjustment.

### 6. Index Regular Adjustment

Based on the principle of stability and dynamic tracking, the constituents of CSI300 shall be reviewed every 6 months. The constituents shall be adjusted according to the result of the regular review.

#### 6.1 Review Time

CSI300 index shall be reviewed during the last ten-days of May and November each year, and the adjustments of constituents shall in principle be implemented on the next trading day the second Friday in June and December each year.

#### 6.2 Data Used for Periodical Review

Usually, the data used for review in May includes trading data and financial data from May 1st of the previous year to April 30th of the review year (In case of an IPO, the data since its sixth trading day after listing are used). The data used for review in November includes trading data and financial data from November 1st of the previous year to October 31st of the review year (In case of an IPO, the data since its sixth trading day after listing are used).

#### 6.3 Number of Constituents Adjustment

Normally, the number of constituents adjusted in each regular adjustment shall not exceed 10%.

#### 6.4 Old Constituents Buffer Zone of Trading Value

If the old constituents of CSI300 rank top 60% by the average daily trading value in the universe, they could enter to the next step of market cap ranking.

#### 6.5 Buffer Zone

CSI300 adopts buffer zone rules to reduce the index adjustment turnover. New candidate securities ranked top 240 will be given priority to add into the index and old constituents ranked top 360 will be given priority to remain in the index.

#### 6.6 Reserve List

Reserve list is established at each regular review of CSI300, which is used to implement temporary adjustment during two adjacent periodical reviews. See rule 8.

#### 6.7 Long Suspension Securities

Generally, for index constituents, in the periodic review of their eligibility:

- Constituents that have been suspended for more than 25 trading days and have not resumed trading as of the deadline of data used for constituents eligibility review, if listed on the candidate deletion list, will be classified as priority deletion securities in principle.
- CSI should report the name list of constituents that have been suspended close to 25 trading days as of the deadline of data used for constituents eligibility review to the index advisory committee. The committee will discuss and decide whether they should be classified as candidate deletion securities.
- □ If the delete securities are under suspension and the reason for the suspension is significant negative event, then the constituent will be deleted from the indexes at the price of 0.00001 Yuan. In the event that such securities under long suspension resume trading at least one trading day prior to the effective date, then CSI will amend the deletion price to market price and release announcements. Under other conditions, suspended old constituent will be deleted from the indexes at its closing market price before suspension.

For non-constituent securities, in the periodic review of their eligibility:

- Securities that are under suspension and without clear expectation about trading resumption on the date of the Index Advisory Committee meeting will not be able to be selected as candidate new additions in principle.
- Securities that have been suspended for more than 25 trading days during the data period used for constituents review can be included in the index only if they have been resumed trading for 3 months except in special circumstances approved by the Index Advisory Committee.
- For new additions suspended between the announcement date and the effective date of the periodical review, CSI will decide whether to adjust the addition or not.

#### 6.8 Securities Experiencing Financial Losses

In principal, the securities except listed on the science and Technology Innovation Board that suffered losses in financial report are not eligible to be selected as candidate new additions in



constituents' periodical review unless the securities have a great impact on the representativeness of index.

### 7. Index Temporary Adjustment

In case of exceptional corporate events, CSI shall make necessary ongoing adjustments CSI300 to maintain the representativeness of the index and ensure that they are investable.

#### 7.1 IPO

The total market value of newly issued securities (total market value = issue price × total shares) is compared with the average daily total market value of securities over the past year, which is until the date of IPO listing announcement. Newly issued securities, which qualify the index universe, ranked top 10 among all securities in terms of total market capitalization adopt the fast-entry index rule. It means they will be included in the index at the end of their tenth trading day, and the bottom ranked original sample will be excluded in terms of total market value of the past year. The rules are not applicable to the securities listed on the Science and Technology Innovation Board and the ChiNext Board.

If an IPO meets the criteria of fast entry, however, time span between its listing time and the effective day of the next constituents periodical review is less than 20 trading days, the fast entry rules shall not be applied immediately but be implemented together with the next regular adjustment.

#### 7.2 Merger and Acquisition

- Two constituent companies merge: The security of the resulting new company shall retain constituent eligibility and remain in the index. The vacancy shall be filled by the security which has the highest ranking in the reserve list.
- One constituent company merges with one non-constituent company: The security of the resulting new company shall retain constituent eligibility and remain in the index.
- One non-constituent company purchases or takes over one constituent company: If the security of the resulting new company ranks higher than the highest security in the reserve list, the new security shall be added to the index. Otherwise, the security which has the highest ranking in the reserve list will be added to the index.
- Merger, spin-off, acquisition and restructuring of non-constituents: If the total market cap of the security of the resulting new company ranks top 10 in the overall market due to the above corporate events, fast entry rules shall be applied here. Otherwise, these

corporate events shall be considered together in the index regular adjustment.

#### 7.3 Spin-off

If one constituent company is spun off to form two or more companies, then whether the resulting companies is eligible for inclusion or not depends on their rankings.

- If two or more of the resulting companies rank higher than the lowest constituent, then the resulting companies that rank higher than the lowest constituent will be added to the index and the lowest constituent(s) will be removed to keep the number of constituents in the index being constant.
- □ If one or more of the resulting companies ranks higher than the lowest constituent, then the (these) new resulting company will be added to the index. If more than one companies enter the index, the lowest constituents will be removed to keep the number of the constituents in the index being constant.
- If all the resulting companies rank lower than the lowest constituent, but some or all the resulting companies rank higher than the highest security in the reserve list, then the highest new company will be added to the index to replace the spun-off company.
- □ If all the resulting companies rank lower than the lowest constituent and the highest security in the reserve list, then the highest company in the reserve list will be added to the index.

#### 7.4 Suspension

If a constituent is suspended from trading, CSI shall determine whether to remove it from the index based on its suspension reasons.

#### 7.5 Delisting

If a constituent company is delisted from the security market, it shall be removed from the index and the vacancy shall be replaced by the company with highest ranking in the reserve list.

#### 7.6 Bankruptcy

If a constituent company files for bankruptcy or receives a bankruptcy order, it shall be removed from the index constituents as soon as practicable and the security with the highest ranking in the reserve list will be added to the index.

#### 7.7 Constituents under Risk Warning Status

On the next trading day after the 2nd Friday of every month, constituents which are under risk

warning status or will enter risk warning status will be deleted from the indices.

In general, the adjustment plans will be announced two trading days prior to the effective date.

### 8. Constituents Reserve List

For the sake of index consistency and transparency, CSI300 adopts a reserve list policy which is used to implement temporary adjustment between two adjacent periodical reviews.

- Reserve list is created in regular adjustment each time. Usually, the number of securities in the list accounts for 5% of the number of constituents. Hence, there are 15 securities in CSI300 reserve list.
- □ If temporary adjustment is needed due to constituents delisting, merger, etc., the securities on the reserve list will be added to the index by rankings in turn.
- If the number of securities in the list is less than 50% of the original number, CSI will complement the list according to the reserve list policy and publicize the new reserve list timely.

#### 9. Maintenance of Constituents

To ensure that CSI300 index reflects trading information of related securities, CSI maintains constituents shares of CSI300 based on the following rules:

- CSI maintains constituent' corporate events based on announcements of listed companies.
- CSI conducts immediate or concentrated adjustments on prices or shares according to the different types of corporate events.

Immediate adjustments refer to:

Constituents' price changes due to dividend distribution shall be implemented on the ex-dividend day.

For corporate events resulting in simultaneous change in constituents' price and shares, such as bonus issue, rights issue, security split and consolidation, etc., adjustments shall be implemented on the ex-right day.

Concentrated adjustments refer to:

Temporary or regular adjustment shall be carried out in occurrence of other corporate events such as secondary offering, debt-to-equity swap, exercise of

warrants etc. The temporary adjustment shall be made to constituents' shares when the accumulated change of the total shares exceeds or reaches 5%. Otherwise, change of shares shall be implemented in the regular adjustment. Usually, the Effective Date of temporary adjustment shall be two trading days later than the new shares listing day disclosed in the announcement made by the listed company when the accumulated change of the total shares exceeds or reaches 5%. (If the announcement day is later than the new shares listing day, the next trading day after the announcement day shall be regarded as the new shares listing day.) CSI will provide notices of temporary adjustment of corporate events in CA files for the reference of index users.

# 10. Index Methodology Amendments

CSI will realize the situation when it is necessary to amend the index methodology by analyzing the market environment, taking advices from the index Advisory Committee and taking feedbacks from the market and external complains. Furthermore, the revision of the index methodology will be implemented according to the Measures for the Implementation of Change of Index Methodologies of China Securities Index Company Limited.

# 11. Information Disclosure

To keep the objectiveness, independence and authority of the index, CSI has established strict information disclosure policy, such that the index could be more transparent, public and fair.

- Any personnel of CSI and the Committee members are forbidden to publicize any information before the information is disclosed. Private interviews to media are forbidden either.
- Media used for information disclosure include, but not limited to, China Securities Journal, Shanghai Securities News and Securities Times, website of Shanghai Stock Exchange and Shenzhen Stock Exchange and website of CSI.
- In general, the result of constituents' periodical review is publicized two weeks ahead.
  Constituents ongoing adjustment plan is publicized in advance as soon as practicable.
  Adjustments of important rules such as index creation and index maintenance are usually publicized three months ahead.

# **12.** Index Dissemination

### 12.1 Index Code

Shanghai Stock Exchange's broadcast system: 000300

Shenzhen Stock Exchange's broadcast system: 399300

#### 12.2 Dissemination Channels

CSI300 index is published through the following official channels:

- (1) Disseminate real time quote via INDEXPRESS and the Data Dissemination System (DDS);
- (2) Daily dissemination via CSI data service platform;
- (3) Daily dissemination on CSI's website: www.csindex.com.cn

In case of a doubt as to the index, the information published through CSI official channels shall prevail.

#### **12.3 Dissemination Frequencies**

CSI300 is calculated and published in real time. And the index is updated according to INDEXPRESS and the Data Dissemination System.