

Shenzhen 100 Index Methodology

February 2019

Shenzhen 100 index is designed to reflect the overall performance of the most influential leading companies listed on Shenzhen Stock Exchange, and to provide instruments for tradeable index products and financial derivatives.

1. Code and Name

Index Name: Shenzhen 100 Index

Short Name: Shenzhen 100

Index Code: 399330

Index Name: Shenzhen 100 Total Return Index

Short Name: Shenzhen 100 TRI

Index Code: 399004

2. Base Date and Base Point

Base Date: December 31, 2002

Base Point: 1000

3. Index Universe

All A shares listed on Shenzhen Stock Exchange satisfying the following criteria:

- 3.1 Not labelled as ‘special treatment’ (ST, *ST);
- 3.2 Listed for more than 6 months, with the exception of ranking in the top 1% of Shenzhen market by A share total market cap;
- 3.3 No major violations in laws and regulations, and no major problems in financial reports in the latest year;
- 3.4 No abnormal operation or substantial losses in the latest year;
- 3.5 No abnormal fluctuation in stock price during the review period.

4. Selection Criteria

Calculate the A share daily average total market cap and A share daily average trading value within the latest 6 months for stocks in the index universe;

Rank the stocks by A share daily average trading value in descending order and remove bottom 10% stocks;

Rank remaining stocks by A share daily average total market cap in descending order and select top 100 stocks as index constituents;

In case of similar rankings, stocks with strong industry representativeness and good financial performance are preferred.

5. Index Calculation

The index is calculated according to the Paasche weighted method, real-time calculation is carried out daily according to the following formula:

$$\begin{aligned} \text{real time index} &= \text{last trading day closing index} \\ &\times \frac{\sum (\text{constituent's real time stock price} \times \text{No. of shares})}{\sum (\text{constituent's last trading day closing price} \times \text{No. of shares})} \end{aligned}$$

Constituents: stocks included in index calculation.

No. of shares: free-float shares of constituents, shares of the numerator and denominator are the same.

Free-float shares: the actual number of tradable shares of a listed company, which is the number of non-restricted shares after excluding ‘the non-restricted shares held by the following three types of shareholders and the persons acting in concert with a shareholding ratio of more than 5%’: ①state-owned (legal entities)

shareholders; ②strategic investors; ③company founders, families or senior executives.

Free-float market cap: stock price times free-float shares.

Numerator: the sum of constituents' real-time free-float market cap.

Denominator: the sum of constituents' last trading day closing free-float market cap.

Stock price selection: opening prices of constituents in call auction are used to calculate the opening index, real-time trading prices are used to calculate the real-time index, and closing prices are used to calculate the closing index. If there is no transaction on that day, the closing price of the previous trading day shall be taken. If a constituent is suspended, its latest trading price shall be taken.

6. Periodic Review

6.1 Review Period

The index is reviewed semi-annually. Review in May is based on trading and fundamental data from November 1 of the previous year to April 30; review in November is based on trading and fundamental data from May 1 to October 31.

6.2 Implementation Date

Periodic reviews are implemented on the next trading day after market closing of the second Friday in June and December each year. Announcements of periodic reviews are published two weeks before implementation.

6.3 Number of New Constituents

The number of new constituents in each periodic review shall not exceed 10% of the total number of index constituents.

6.4 Buffer Zone

New candidate stocks ranking top 70% of the total number of index constituents are selected in order, existing constituents ranking top 130% are remained in the index with priority.

6.5 Reserved Stocks

After new constituents are determined, remaining stocks will be ranked by daily average total market cap in descending order and 5% of the total number of index constituents will be selected as reserved stocks.

7. Non-periodic Review

7.1 Fast Entry Rules

For a newly issued stock ranking top 10 in Shenzhen market by average daily total market cap for the first 5 trading days, it will be added into the index on the 15th trading day to replace the existing constituent with the smallest average A share total market cap.

For a listed company ranking top 10 in Shenzhen market by the average A share total market cap due to M&A and other corporate actions, the same rules shall be applied.

7.2 Merger and Acquisition

Constituent companies merge: the stock of the resulting company will remain as a constituent. The vacancy will be filled by the highest ranked reserved stock.

A constituent company acquires a non-constituent company: the stock of the resulting company will remain as a constituent.

A non-constituent company acquires a constituent company: the stock of the resulting company becomes index constituent if it ranks above all reserved stocks, otherwise the vacancy will be filled by the highest ranked reserved stock.

7.3 Splits

When a constituent company splits into two or more companies, a vacancy will be created. Whether resulting companies will be included as index constituents depends on their rankings.

If every resulting company ranks above the lowest constituent, then all resulting companies will be added to the index, and the lowest constituent(s) will be removed to keep the number of index constituents constant.

If every resulting company ranks below the lowest ranked constituent but some of them rank above all reserved stocks, then the highest ranked resulting companies will be added to the index.

If every resulting company ranks below the lowest ranked constituent and the highest ranked reserved stock, then the highest ranked reserved stock will be added to the index.

7.4 Suspension of Listing and Delisting

If a constituent is subject to suspension of listing, it will be replaced by the highest ranked reserved stock from the day of suspension.

If a constituent is subject to delisting, it will be replaced by the highest ranked reserved stock from the first trading day of its

delisting preparing period.

If a constituent is subject to probability of suspension of listing or delisting due to substantial violations in regulations (such as fraud of financial reports), it will be replaced by the highest ranked reserved stock with permission of the Index Advisory Committee.

7.5 Risk Alert

A constituent subject to risk alert (ST or *ST) by the exchange will be removed on the next trading day of the second Friday of the month following the implementation of risk alert, the highest ranked reserved stock will be included.

8. Reserved Stocks

The reserved stocks list will be created for non-periodic adjustments during the periodic review.

Constituents subject to listing suspension or delisting will be replaced by the highest ranked reserved stocks.

Number of reserved stocks is set to cover 5% of the total number of index constituents. Reserved stocks list will be refilled and

announced in time when the number of reserved stocks is less than 50%.

9. Adjustment for Index Calculation

9.1 Adjustment for Previous Closing Price

For total return index, the closing price of a constituent on record date will be updated to the reference ex-right price on ex-date when dividend payment, bonus issue, rights issue, capital/surplus reserve issue or other ex-right actions implemented. The reference ex-right price shall be referred to Shenzhen Stock Exchange.

For price index, the closing price of a constituent will not be adjusted for cash dividend. Adjustments for other ex-dividend or ex-right actions are the same as those for total return index.

9.2 Adjustment for Free-float Shares

9.2.1 Real-time Adjustment

In the event of bonus issue, capital/surplus reserve issue or rights issue, free-float shares of constituents shall be adjusted on ex-date.

In the event of secondary offering or rights issue, free-float shares of

constituents shall be adjusted on the listing date of new shares.

In the event of debt-equity conversion, shares repurchase or exercise of warrants, free-float shares of constituents shall be adjusted on the next trading day of the announcement.

9.2.2 Periodic Adjustment

Changes of free-float shares caused by non-corporate actions such as increase/decrease of major shareholders' holdings and listing of restricted shares shall be adjusted on the next trading day of the second Friday in June and December, according to the shareholding data from latest periodic and non-periodic reports.

10. Index Dissemination and Management

10.1 Index Dissemination

Shenzhen 100 Index shall be disseminated through the following channels:

Real-time quotes shall be disseminated via the Shenzhen Stock Exchange information release system and Internet access service of quotes;

Quotes shall be daily disseminated via data transmission channels such as SSCC and FTP;

Quotes shall be daily disseminated to the public via CNI's website (www.cnindex.com.cn).

10.2 Index Management

Shenzhen 100 Index is compiled, maintained and operated by Shenzhen Securities Information Company Limited ('SSIC'), delegated and authorized by Shenzhen Stock Exchange. The index department of SSIC periodically reviews constituents' representativeness and determines whether to change any constituents according to the review.

Shenzhen 100 Index is an asset owned by Shenzhen Stock Exchange. Without written authorization of Shenzhen Stock Exchange or SSIC, no institution or individual shall track or trade the index, or use the index as an evaluation benchmark.

11. Disclaimer

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