

# Index Methodology

For Managing the Hang Seng China Enterprises Index



# **Amendment History**

	Date	Description		
1.0	September 2011	First Issue		
1.1	August 2012	Updated turnover requirement in Section 3 – Constituent		
		Eligibility		
1.2	February 2015	Updated description of universe in Section 3 – Constituent		
		Eligibility		
1.3	March 2015	Updated description of turnover requirement in Section 3 –		
		Constituent Eligibility		
1.4	April 2016	Updated treatment to trading suspension in Section 4 –		
		Index Review and Constituent Changes		
1.5	June 2016	Addition of exclusion of Companies with High Shareholding		
		Concentration in Section 4 - Index Review and Constituent		
		Changes		
1.6	December 2017	Updated to reflect Interim treatment during Index enhancement		
		transition period in Section 3 – Constituent Eligibility, Section 4 –		
		Index Review and Constituent Changes and Section 6 –		
		Index Rebalancing		
1.7	May 2018	Rectification of the section numbers referred in Section 4 –		
		Index Review		
1.8	February 2019	Updated to reflect the Interim treatment for further index		
		enhancement in Section 3 – Constituent Eligibility, Section 4 –		
		Index Review and Constituent Changes and Section 6 –		
		Index Rebalancing		
1.9	September 2019	Updated the description of universe in Section 3 – Constituent		
		Eligibility		
2.0	June 2020	Updated Section 3 – Constituent Eligibility and Section 5 –		
		Index Calculation		
2.1	September 2020	Updated Vendor Code in Section 7 – Dissemination		
2.2	October 2020	Added Fast Entry Rule in Section 4 – Index Review and		
		Constituent Changes		



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## 1 Overview

- 1.1 The Hang Seng China Enterprises Index ("HSCEI") serves as a benchmark that reflects the overall performance of Mainland securities listed in Hong Kong.
- 1.2 The HSCEI is freefloat-adjusted market-capitalisation weighted with a cap on individual constituent weightings.
- 1.3 The HSCEI is calculated and disseminated real-time at 2-second intervals during the trading hours of the Stock Exchange of Hong Kong ("HKEX").



# 2 Management Responsibility

### Hang Seng Indexes Company Ltd ("HSIL")

- 2.1 HSIL is responsible for conducting regular reviews in accordance with the Index Methodology.
- 2.2 HSIL is responsible for monitoring company announcements and making ad hoc proposals which must be approved by the Chairman of the HSI Advisory Committee if constituent changes between the regular reviews are needed.
- 2.3 HSIL is responsible for seeking the HSI Advisory Committee's endorsement of any special action in cases where, due to exceptional circumstances, an index review is not conducted according to the Index Methodology.
- 2.4 HSIL is responsible for seeking the HSI Advisory Committee's endorsement of changes to the Index Methodology.

### **HSI Advisory Committee**

- 2.5 The Committee is responsible for ensuring index reviews are undertaken in accordance with the Index Methodology.
- 2.6 The Committee is responsible for reviewing any actions proposed by HSIL in the event that, due to exceptional circumstances, an index review is not conducted according to the Index Methodology.
- 2.7 The Committee is responsible for reviewing and endorsing all changes to the Index Methodology as proposed by HSIL.
- 2.8 The Committee is responsible for giving advice on any issues related to the Index Methodology.



# **3** Constituent Eligibility

### Universe

3.1 The universe of securities ("Universe") of HSCEI includes Mainland securities listed on the Main Board of the HKEX only.

It includes the Primary or Secondary listed shares of companies and Real Estate Investment Trusts ("REITs").

It excludes Stapled Securities, Foreign Companies, Biotech Companies with stock names end with marker "B" and Investment Companies listed under Chapter 21 of the Listing Rules.

#### **Mainland Security Definition**

3.2 A Mainland security is defined as a Hong Kong-listed security that has at least 50% of its sales revenue (or profit or assets, if relevant) derived from the Mainland.

### **Eligible Stocks**

3.3 A stock is eligible for selection as a constituent if it fulfils the following eligibility criteria.

#### **Listing History Requirement**

3.4 Stocks should have been listed for at least one month, starting from the listing date to the review cut-off date (both dates inclusive). Listing history from overseas exchanges does not count.

#### **Turnover Requirement**

3.5 For each stock, its turnover velocity in each of the past 12 months is calculated using the following formula:

 $Velocity = \frac{Median \text{ of Daily Traded Shares in Specific Calendar Month}}{Freefloat-adjusted Issued Shares at Month End}$ 

- 3.6 Freefloat-adjusted issued shares at the end of each month is used as the denominator in velocity calculation. The freefloat-adjusted factor ("FAF") for each stock is calculated and reviewed at the end of March, June, September and December each year.
- 3.7 A stock is regarded as passing the monthly turnover test if it attains a minimum velocity of 0.1% in that month.



# **3** Constituent Eligibility

#### For New Constituents

- 3.8 In order to meet the turnover requirement, a stock should fulfil the following criteria:
  - (a) Velocity is a minimum of 0.1% for at least 10 out of the past 12 months, and
    - (b) Velocity is a minimum of 0.1% in each of the latest three months

#### For Existing Constituents

- 3.9 In order to meet the turnover requirement, a stock should fulfil the following criteria:
  - (a) Velocity is a minimum of 0.1% for at least 10 out of the past 12 months
  - (b) If a constituent fails to meet the turnover requirement as mentioned in 3.9 (a), a supplementary turnover test will be applied for those months in which velocity is less than 0.1%:
    - i. calculate the monthly aggregate turnover of the constituent
    - ii. if the monthly aggregate turnover is among the top 90th percentile of the total market\*, the constituent passes the monthly turnover test for that month
  - (c) The constituent will be regarded as meeting the turnover requirement if 3.9 (a) is fulfilled after applying 3.9 (b) as a supplementary test

\* Total market includes securities in the universe of HSCI.

3.10 For a stock with a trading history of less than 12 months or a stock that has transferred from the Growth Enterprise Market<sup>#</sup> ("GEM") to the Main Board in the past 12 months before the data review cut-off date, the following requirements replace those in sections 3.8 and 3.9.

Trading Record	Measurements^	
< 6 months	1) attain a minimum velocity of 0.1% for all trading months	
≥ 6 months	<ol> <li>cannot have more than one month in which stock has failed to attain a velocity of at least 0.1%, AND</li> <li>for the latest three months, stock needs to have attained 0.1% for all trading months if it is not an existing constituent.</li> </ol>	

<sup>#</sup> Stocks transferred from GEM to the Main Board will be treated as new issues.

^ For existing constituents, the supplementary turnover test as described in section 3.9 (b) also applies.

3.11 For a stock which has been suspended for any complete month(s) during the past 12 months before the review cut-off date, the relevant month(s) will be excluded from the velocity calculation. The stock should meet the requirements as described in section 3.10.



# **3** Constituent Eligibility

### **Number of Constituents**

3.12 The number of constituent stocks is fixed at 50.

### **Constituent Selection**

#### Market Value ("MV")

- 3.13 The MV of an individual stock refers to the average of month-end MVs for the past 12 months ("12-month-average MV") of any review period. For stocks with a listing history of less than 12 months, the MV will be the average of the past month-end MVs since listing.
- 3.14 MV is defined as Number of Issued Shares time Share Price. Number of Issued Shares refers to the number of shares as per that particular security. For secondary-listed companies, Number of Issued Shares refers to the number of shares registered in Hong Kong.

#### Freefloat-adjusted MV ("FFMV")

- 3.15 The FFMV of an individual stock refers to the 12-month-average MV after freefloat adjustment, i.e. 12-month-average MV multiplied by FAF, calculated as at the review data cut-off date.
- 3.16 All eligible stocks are ranked in terms of Combined MV Score, calculated from MV Rank and FFMV Rank using the following formula:
  - (a) 0.5 MV Rank + 0.5 FFMV Rank = Combined MV Score
  - (b) Rank of the Combined MV Score = Combined MV Rank
  - (c) In cases where two stocks have the same Combined MV Score, a higher rank will be assigned to the stock with the higher MV Rank
- 3.17 The top 50 eligible stocks with the highest Combined MV Rank as described in 3.16 will be selected as constituents of the HSCEI, subject to the buffer zone rule (as described in 4.4-4.7) in each review.



# 4 Index Review and Constituent Changes

### **Regular Quarterly Review**

- 4.1 HSIL undertakes regular quarterly reviews of HSCEI constituents with data cut-off dates of the end of March, June, September and December each year.
- 4.2 A quarterly review is normally completed within eight weeks after the end of each calendar quarter.
- 4.3 Eligible candidates will be selected as constituents of the HSCEI if they satisfy the requirements of section 3.

#### **Buffer Zone**

- 4.4 Existing constituents ranked 61st or lower will be removed from the HSCEI, while nonconstituent stocks ranked 40th or above will be included.
- 4.5 If the number of incoming stocks is greater than the number of outgoing constituents, constituents with the lowest Combined MV Rank will be removed from the index in order to maintain the number of constituents at 50.
- 4.6 If the number of incoming stocks is smaller than the number of outgoing constituents, stocks with the highest Combined MV Rank will be added to the index in order to maintain the number of constituents at 50.
- 4.7 In the September 2020 rebalancing, the number of constituent changes will be limited to three. This limit will not be applicable from the December 2020 rebalancing onwards.



### 4 Index Review and Constituent Changes

#### **Reserve List**

4.8 The five non-constituents with the highest Combined MV Rank will form a Reserve List. The purpose of the Reserve List is to facilitate the replacement of any outgoing constituents between regular reviews in cases where a constituent may be removed due to trading suspension or delisting.

#### Effective Dates

4.9 Effective dates of constituent changes will be the next trading day after the first Friday of March, June, September and December. If that Friday falls on a public holiday, it will be postponed to the next Friday, subject to the final decision made by HSIL. Under normal circumstances, five trading days' notice will be given for any constituent changes made before the effective dates.

#### Fast Entry Rule

- 4.10 A newly listed Mainland security will be added to the HSCEI out of regular review periods if its MV ranks within the top 10 of the existing constituents at the market close of its first trading day.
- 4.11 The ad hoc addition will normally be implemented after the close of the 10th trading day of the new issue. No existing constituent will be removed from the HSCEI under the Fast Entry Rule.
- 4.12 The constituent number will be reset in the next regular rebalancing.

#### Trading Suspension

4.13 Whether or not to remove a suspended constituent from the HSCEI and replace it with an appropriate candidate will be determined in the regular index reviews. Should a suspended constituent be removed from the HSCEI, its last traded price may be adjusted down to the lowest price in the system (i.e. \$0.0001 in the security's price currency) or an official residual price (if available) for index calculation on the trading day preceding the effective date of the constituent changes. Please refer to the Index Operation Guide for details.

#### High Shareholding Concentration

4.14 Companies with High Shareholding Concentration\* will not be eligible for inclusion in the HSCEI.

\* According to the "High Shareholding Concentration Announcements" posted on the Securities and Futures Commission's website.



# 5 Index Calculation

5.1 The HSCEI is freefloat-adjusted MV weighted with a specified cap-level on individual constituents according to the below.

Category	Cap-level
Secondary-listed constituents	5%
WVR constituents	5%
Other constituents	10%

- 5.2 The weightings of the constituents will be derived in the following manner:
  - (a) Initial weightings of the constituents are derived in accordance with the freefloat-adjusted MV and are capped at 10%
  - (b) Any excessive weightings will be re-distributed to constituents with weightings less than 10% in proportion to their original weightings in step (a)
  - (c) Step (b) will be repeated until no constituents has a weighting higher than 10%
  - (d) If, subsequent to the re-distribution, WVR and/ or secondary-listed constituents with weightings more than 5% emerge, they will be capped at 5% and the excessive weightings will be re-distributed to WVR and/ or secondary-listed constituents with weightings less than 5% and other constituents with weightings less than 10% in proportion to their redistributed weightings in step (c)
  - (e) Step (d) will be repeated until no constituents has a weighting higher than their corresponding cap-level as specified in 5.1
- 5.3 The formula of the HSCEI is set out below:

$$Current Index = \frac{\sum (P_t \times IS \times FAF \times CF)}{\sum (P_{t-1} \times IS \times FAF \times CF)} \times Yesterday's Closing Index$$

- $P_t$ : Current Price at Day t
- $P_{t-1}$ : Closing Price at Day (t-1)
- IS : Issued Shares
- FAF : Freefloat-adjusted Factor, which is between 0 and 1
- *CF* : *Capping Factor, which is between 0 and 1*
- 5.4 The HSCEI is a price index without adjustments for cash dividends or warrant bonuses.



# 6 Index Rebalancing

6.1 The following provides the general principles on index rebalancing. Please refer to the Index Operation Guide for details about corporate actions adjustments and index rebalancing.

### **Frequency and Schedule**

- 6.2 The adjustment of the freefloat-adjusted factors ("FAFs"), the calculation of the Cap Factors ("CFs") and the update of issued shares ("IS") will be undertaken quarterly.
- 6.3 The regular rebalancing is usually implemented after market close on the first Friday in March, June, September and December, and comes into effect on the next trading day.
- 6.4 The schedule for regular index rebalancing is available at HSIL's website: https://www.hsi.com.hk/static/uploads/contents/en/products/is\_update.xlsx

### Ad Hoc Changes

- 6.5 IS will be updated simultaneously with the index adjustment for corporate actions such as bonus issue, rights issue, stock split and stock consolidation.
- 6.6 Ad hoc rebalancing will be conducted if a constituent's IS and/or FAF is substantially different from the production data.
- 6.7 The index will also be recapped in the event of constituent changes if the newly added component weighting is higher than the index cap level.
- 6.8 A minimum notice period of two trading days will be given to subscribers of data products issued by HSIL for any ad hoc rebalancing.



# 7 Dissemination

- 7.1 The HSCEI is calculated and disseminated real-time every 2 seconds during trading hours on each trading day of the Hong Kong stock market, based on the calendar of the HKEX.
- 7.2 Please refer to the index dissemination timetable provided on HSIL's website for further details. (https://www.hsi.com.hk/static/uploads/contents/en/products/timetable.xlsx)
- 7.3 The HSCEI is calculated and published in Hong Kong dollars.
- 7.4 Vendor codes for the HSCEI

Vendor	Code for Price Index	Code for Total Return Index	Code for Net Total Return Index
Refinitiv	.HSCE	.HSCEDV	.HSCEDVN
Bloomberg	HSCEI	HSCEIRH	HSCEINH



# 8 **Contact Information**

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# 9 Disclaimer

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