恒生指數
HANG SENG INDEXES

Index Methodology

For Managing the

Hang Seng Stock Connect Greater Bay Area Index Series

Jun 2026 | Version 1.12

www.hsi.com.hk
A wholly-owned subsidiary of Hang Seng Bank

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Amendment History

	Date	Description
1.0	Apr 2019	First Issue
1.1	May 2019	Added Hang Seng Stock Connect Greater Bay Area Innovation Top 50 Index
1.2	Jun 2019	Added Hang Seng Stock Connect Greater Bay Area High Dividend Yield Index
1.3	Sep 2019	Updated Section 3 – Constituent Selection to reflect changes in the Hang Seng Industry Classification System
1.4	Mar 2022	Updated Section 3 – Constituent Eligibility for Hang Seng Stock Connect Greater Bay Area High Dividend Yield Index • Added Price Performance Screening • Exceptional treatment for abnormally high-yield candidate
1.5	Feb 2023	Added handling of candidates with negative equity in the Hang Seng Stock Connect Greater Bay Area Quality Growth Index and the Hang Seng Stock Connect Greater Bay Area Innovation Top 50 Index under Section 3 Constituent Eligibility (effective Dec 2022 index review)
1.6	Jun 2023	Updated Section 3 – Constituent Selection to reflect changes in the Hang Seng Industry Classification System
1.7	Apr 2024	Updated Sector Requirements (Effective starting from the index review for the period ended 30 June 2024)
1.8	Dec 2024	Updated Section 3 – Constituent Selection to reflect changes in MV calculation
1.9	Feb 2025	Updated Section 5 – Index Calculation to reflect changes in cap level for Hang Seng Stock Connect Hong Kong Greater Bay Area Index
1.10	Apr 2025	Removed relevant contents due to termination of the following indexes: • Hang Seng Stock Connect Hong Kong Greater Bay Area Index • Hang Seng Stock Connect China A Greater Bay Area Index • Hang Seng Stock Connect Greater Bay Area Hong Kong Index • Hang Seng Stock Connect Greater Bay Area Guangzhou-Foshan-Zhaoqing Index • Hang Seng Stock Connect Greater Bay Area Shenzhen-Dongguan-Huizhou Index • Hang Seng Stock Connect Greater Bay Area Macao-Zhuhai-Zhongshan-Jiangmen Index (effective on 28 Apr 2025)

Amendment History

	Date	Description
1.11	Jun 2025	Updated Section 3 – Constituent Selection to reflect changes in the Hang Seng Industry Classification System (Effective starting from the index review for the period ended 30 June 2025)
1.12	Jun 2026	• Updated Section 3 – Constituent Selection to reflect changes in the Hang Seng Industry Classification System • Updated Section 4.6 – Effective Date • Updated Section 6.3 – Index Rebalancing Schedule (Effective starting from the index review for the period ended 30 June 2026)

Table of Content

1 Overview

1.1 The Guangdong-Hong Kong-Macao Greater Bay Area encompasses nine cities and two Special Adminstrative Regions ('SARs'), namely Hong Kong, Macao, Guangzhou, Shenzhen, Zhuhai, Foshan, Zhongshan, Dongguan, Zhaoqing, Huizhou and Jiangmen.

1.2 The Hang Seng Stock Connect Greater Bay Area Index Series aims to reflect the performance of Hong Kong-listed companies and mainland China-listed companies that operate in Guangdong-Hong Kong-Macao Greater Bay Area and are eligible for Northbound or Southbound trading under the Stock Connect scheme by various dimensions.

1.3 The total number of indexes in the index series is 14.

1.4 The Hang Seng Stock Connect Greater Bay Area Index Series is calculated and disseminated real-time at 2-second intervals during the trading hours when the Hong Kong and/or Mainland stock markets are open.

1 Overview

Full List of Indexes:

Benchmark Index
• Hang Seng Stock Connect Greater Bay Area Composite Index
Industry (By Industry Level of Hang Seng Industry Classification System)
• Hang Seng Stock Connect Greater Bay Area Financials Index
• Hang Seng Stock Connect Greater Bay Area Information Technology Index
• Hang Seng Stock Connect Greater Bay Area Industrials Index
• Hang Seng Stock Connect Greater Bay Area Properties & Construction Index
Thematic (By Subsector Level of Hang Seng Industry Classification System)
• Hang Seng Stock Connect Greater Bay Area Consumer Goods Index
• Hang Seng Stock Connect Greater Bay Area Consumer Services Index
• Hang Seng Stock Connect Greater Bay Area New Economy Index
• Hang Seng Stock Connect Greater Bay Area Infrastructure & Transportation Index
• Hang Seng Stock Connect Greater Bay Area Quality Life Index
Factor & Strategy (By Quantitative Factor or Investment Strategy)
• Hang Seng Stock Connect Greater Bay Area Region Top Index
• Hang Seng Stock Connect Greater Bay Area Quality Growth Index
• Hang Seng Stock Connect Greater Bay Area Innovation Top 50 Index
• Hang Seng Stock Connect Greater Bay Area High Dividend Yield Index

2 Management Responsibility

Hang Seng Indexes Company Ltd ("HSIL")

2.1 HSIL is responsible for conducting regular reviews according to the Index Methodology.

2.2 HSIL is responsible for monitoring company announcements and making ad hoc proposals if constituent changes between the regular reviews are needed.

2.3 HSIL is responsible for seeking the HSIL Index Governance 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 HSIL Index Governance Committee's endorsement of changes to the Index Methodology.

HSI Advisory Committee

2.5 When a change to the index methodology is considered material, i.e. affecting the principles/ objectives of the index construction; or resulting changes in the rules impacting the index universe, constituent selection and their weightings, as per agreement by the HSIL Index Governance Committee, it will be brought to the HSI Advisory Committee for advice.

3 Constituent Eligibility

Hang Seng Stock Connect Greater Bay Area Composite Index ("HSGBAC")

Universe

3.1 The universe for the HSGBAC ("Universe") includes companies primarily listed on the Main Board of the Stock Exchange of Hong Kong ("SEHK"), the Shanghai Stock Exchange ("SSE") and the Shenzhen Stock Exchange ("SZSE") that fulfil the eligibility criteria for Northbound or Southbound Trading under the Stock Connect scheme.

Eligible Companies

3.2 A company is eligible if either its Hong Kong-listed shares or Mainland-listed shares have fulfilled the following eligibility criteria.

Hong Kong-listed shares

3.3 HK-listed shares are Hang Seng Composite Index ("HSCI") constituents that fulfil the eligibility criteria for Southbound Trading under the Stock Connect scheme.

Mainland-listed shares

3.4 Mainland-listed shares should fulfil the eligibility criteria for Northbound Trading under the Stock Connect scheme.

Eligible Criteria

3.5 A company is eligible for constituent selection if it fulfills the following eligibility criteria.

Headquarters Requirement

3.6 To be eligible for consideration as a potential constituent, a company must be headquartered in the following cities/Special Administrative Regions:

Dongguan	Foshan	Guangzhou	Hong Kong	Huizhou	Jiangmen
Macao	Shenzhen	Zhaoqing	Zhongshan	Zhuhai	

Non Red-Chip Companies

3.7 A company is classified as headquartered in the cities/Special Administrative Regions listed in section 3.6 if its headquarter or primary centre of operations is in the cities/Special Administrative Regions listed in section 3.6.

3 Constituent Eligibility

Red-Chip Companies

3.8 Red-chip company is classified as headquartered in the cities/Special Administrative Regions listed in section 3.6 if it satisfies the following requirements:
(a) Its headquarter or primary centre of operations is in the cities/Special Administrative Regions listed in section 3.6;
(b) The headquarter or primary centre of operations of its holding company is in the cities/Special Administrative Regions listed in section 3.6;
(c) Its main operation is in the cities/Special Administrative Regions listed in section 3.6; or
(d) It was established in the cities/Special Administrative Regions listed in section 3.6.

3.9 The four criteria for Red-chip company set out above will all be taken into consideration. In case of conflicts, the one that better reflects the company's status will be adopted.

Revenue Requirement

3.10 Eligible Hong Kong-listed and Mainland-listed securities should have at least 50% of revenue derived from mainland China, Hong Kong and/or Macao in the latest complete fiscal year.

Constituent Selection

3.11 The total MV of all classes of shares (including unlisted portion) of eligible companies will be used for ranking.

Note: The estimated price for any unlisted share is the average price weighted by number of each class of listed shares. For "AH" companies, the P^A *and* P^H *in the below formula will be adjusted to the same currency for calculation.*

$$\text{Price for unlisted share} = \frac{P^A \times \text{No.of A-share} + P^H \times \text{No.of H-share}}{\text{No. of A-share} + \text{No. of H-share}}$$

3.12 The total MV of a company refers to the average daily market value of the past 12 months of any review period. For those companies with a listing history of less than 12 months, the total MV refers to the average of the past trading days since the company made its listing debut.

3.13 The 250 companies with the highest rank based on total MV will be selected as constituents of the HSGBAC.

3 Constituent Eligibility

Special Treatment for "AR" Companies

3.14 All eligible securities will be selected as constituents of the respective indexes.

3.15 "AR" Company is defined as Red-chip listed on SEHK but also with A-share listing on mainland China stock market, which can be in the form of two companies thus is different from "AH" Company.

3.16 As at the date of the Guidelines, there is only one "AR" Company named China Unicom. China Unicom "A" (600050.SS) is the holding company of China Unicom "R" (0762.HK), which wholly owns the subsidiaries engaging in telecommunication businesses, and does not have other businesses.

Note: An "AH" Company is one company issuing two classes of shares, while an "AR" Company can be in the form of two different companies and one is a holding company of the other.

3.17 For China Unicom, the only "AR" Company, the following rules on its selection as constituent will be applied:

(a) In index reviews, the two stocks will be ranked separately by their respective full MV;
(b) Either the "A"-class company or the "R"-class company can be selected as constituent, and the inclusion of one company would not lead to automatic selection of another company;
(c) If both "A" and "R" class companies are selected as constituents, they will be counted and will only take one place in the index.

Number of Constituents

3.18 The number of constituent companies is fixed at 250.

3.19 If a company has more than one class of listed shares in HK and / or PRC, all classes of shares will be included in the HSGBAC.

3 Constituent Eligibility

Industry (By Industry Level of the Hang Seng Industry Classification System)

- Hang Seng Stock Connect Greater Bay Area Industrials Index ("HSBAI")
- Hang Seng Stock Connect Greater Bay Area Financials Index ("HSBAF")
- Hang Seng Stock Connect Greater Bay Area Properties & Construction Index ("HSBAPC")
- Hang Seng Stock Connect Greater Bay Area Information Technology Index ("HSBAIT")

Universe

3.20 The universe includes all Hang Seng Greater Bay Area Composite Index ("HSGBAC") constituents.

Constituent Selection

3.21 A company will be selected as constituents for the following indexes if it fulfils the corresponding industry requirement :

Industry		HSBAI	HSBAF	HSBAPC	HSBAIT
10	Industrials	✓			
50	Financials		✓		
60	Properties & Construction			✓	
70	Information Technology				✓

Number of Constituents

3.22 The number of constituent securities is variable and there is no limit to the number of constituents.

3 Constituent Eligibility

Thematic (By Subsector Level of the Hang Seng Industry Classification System)

- Hang Seng Stock Connect Greater Bay Area Consumer Goods Index (“HSBACG”)
- Hang Seng Stock Connect Greater Bay Area Consumer Services Index (“HSBACS”)
- Hang Seng Stock Connect Greater Bay Area Infrastructure & Transportation Index (“HSBAIN”)
- Hang Seng Stock Connect Greater Bay Area New Economy Index (“HSBANE”)
- Hang Seng Stock Connect Greater Bay Area Quality Life Index (“HSBAQL”)

Universe

3.23 The universe includes all Hang Seng Greater Bay Area Composite Index (“HSGBAC”) constituents.

Constituent Selection

3.24 A company will be selected as constituents for the following indexes if it fulfils the corresponding sector requirement:

HSBACG

Industry		Sector	
23	Consumer Discretionary	2310	Automobiles
		2320	Household Goods & Electronics
		2330	Textiles & Clothing
25	Consumer Staples	2510	Food & Beverages
		2520	Agricultural Products
28	Healthcare	2810	Pharmaceuticals & Biotechnology

HSBACS

Industry		Sector	
23	Consumer Discretionary	2340	Travel & Leisure
		2350	Media & Entertainment
		2360	Support Services
		2370	Specialty Retail
25	Consumer Staples	2530	Consumer Staple Retailers
28	Healthcare	2820	Other Healthcare

3 Constituent Eligibility

HSBAIN

Industry		Sector		Subsector	
10	Industrials	1020	Industrial Transportation	102010	Shipping & Port Operation
				102020	Railway & Tollroad Operation
				102030	Air Freight & Logistics
				102040	Road Transportation
23	Consumer Discretionary	2340	Travel & Leisure	234010	Transportation
				234020	Airlines
60	Properties & Construction	6020	Construction	602010	Construction Materials
				602030	Heavy Construction & Engineering

HSBANE

Industry		Sector		Subsector	
10	Industrials	1010	Industrial Engineering	101020	Industrial Components & Equipment
				101025	Electrical & Electronic Components
				101030	Environmental Engineering
				101050	New Energy Materials
				101060	Aerospace & Defense
				101070	Energy Storage Units
23	Consumer Discretionary	2310	Automobiles	231010	Automobiles
				231020	Auto Parts
		2320	Household Goods & Electronics	232010	Home Appliances
				232020	Consumer Electronics
		2340	Travel & Leisure	234050	Travel & Tourism
		2350	Media & Entertainment	235010	Advertising & Marketing
				235020	Broadcasting
				235030	Movies & Entertainment
				235040	Publishing
				235050	Interactive Media & Services

3 Constituent Eligibility

Industry		Sector		Subsector	
		2360	Support Services	236010	Education
		2370	Specialty Retail	237010	Automotive Retailers
				237020	Apparel Retailers
				237030	Home Improvement Retailers
				237040	Diversified Retailers
				237050	Other Retailers
				237060	Online Retailers
28	Healthcare	2810	Pharmaceuticals & Biotechnology	281010	Pharmaceuticals
				281020	Biotechnology
				281040	Medicine Distribution
				281050	Pharma & Biotech Contract Services
		2820	Other Healthcare	282010	Medical Devices & Supplies
				282020	Medical & Aesthetic Services
				282030	Dietary Supplements
				282040	Skincare & Cosmetics
35	Telecommunications	3500	Telecommunications	350010	Satellite & Wireless Communication
				350020	Telecommunication Services
40	Utilities	4000	Utilities	400030	Water
				400040	Alternative/ Renewable Energy
				400050	Nuclear Energy
50	Financials	5030	Other Financials	503050	Payment Services
70	Information Technology	7010	IT Hardware	701010	Consumer Telecommunication Equipment & Components

3 Constituent Eligibility

Industry	Sector		Subsector	
			701015	Telecommunication Network Infrastructure
			701020	Computers & Peripherals
			701030	Robotic Systems & Solutions
	7020	Software & Services	702015	Digital Solution Services
			702025	Internet Services & Infrastructure
			702030	Application Software
			702040	Game Software
	7030	Semiconductors	703010	Semiconductors
			703020	Semiconductor Equipment & Materials

Securities of the following industries will also be eligible for selection if they fulfill the corresponding criteria:

Industry		Criteria
23	Consumer Discretionary	Retail companies that perform major business operations by using internet platform
25	Consumer Staples	
50	Financials	Financial companies that perform major business operations by using internet platform

HSBAQL

Industry		Sector	
23	Consumer Discretionary	2310	Automobiles
		2320	Household Goods & Electronics
		2330	Textiles & Clothing
		2340	Travel & Leisure
		2350	Media & Entertainment
		2360	Support Services
		2370	Specialty Retail
25	Consumer Staples	2530	Consumer Staple Retailers
28	Healthcare	2820	Other Healthcare

Number of Constituents

3.25 The number of constituent securities is variable and there is no limit to the number of constituents.

3 Constituent Eligibility

Factor & Strategy (By Quantitative Factor or Investment Strategy)

- Hang Seng Stock Connect Greater Bay Area Region Top Index (HSBART)
- Hang Seng Stock Connect Greater Bay Area Quality Growth Index (HSBAQG)
- Hang Seng Stock Connect Greater Bay Area Innovation Top 50 Index (HSBAI50)
- Hang Seng Stock Connect Greater Bay Area High Dividend Yield Index (HSBAHD)

Universe

3.26 The universe includes all Hang Seng Greater Bay Area Composite Index ("HSGBAC") constituents.

Eligible Securities

3.27 A security is eligible for constituent selection if it fulfills the following eligibility criteria.

Daily Turnover Requirement

3.28 Eligible Hong Kong-listed securities must have an average daily turnover of at least HKD20 million in the past six months.

3.29 Eligible Mainland-listed securities must have an average daily turnover of at least RMB20 million in the past six months.

3.30 If a company has more than one class of listed shares, it is considered to have fulfilled the daily turnover requirement if any one of its share classes meets the turnover requirement as stated above.

Constituent Selection

HSBART

3.31 The 11 cities/Special Administrative Regions are first classified into 4 regions. A combined ranking of company MV, net profit and revenue is applied to the stocks in each region.

Region 1	Region 2	Region 3	Region 4
Hong Kong	Guangzhou Foshan Zhaoqing	Shenzhen Dongguan Huizhou	Macao Zhuhai Zhongshan Jiangmen

3.32 Combined ranking scores are determined as follows:

"Score" value = Company-wide MV Rank* x 50% + Net Profit Rank** x 30% + Revenue Rank** x 20%

** "Company-wide MV" includes MVs of A-shares, B-shares, H-shares and unlisted shares, and is expressed as an average of the past 12 months (daily basis).*
*** "Net Profit Rank" and "Revenue Rank" refer to the rank of averages of the relevant full-year figures for the past two fiscal years.*

3.33 Stocks are ranked in ascending order based on their "scores". The top ten stocks with the highest rank in each region will be selected as constituents. If there are less than ten stocks in a certain region, all of the stocks will be selected.

3.34 If two stocks have the same final rank in a certain region, the one with the higher freefloat-adjusted MV will be selected.

3.35 The maximum number of constituents is capped at 40 but the actual number may be smaller depending on the number of companies in each region.

HSBAQG

Quality and Growth Factors

3.36 The following quality and growth factors are considered for constituent selection.

Return on Equity ("ROE")

3.37 Return on Equity is defined as follows.

$$ROE = \frac{Net\ Income_t}{0.5 \times (Total\ Equity_{t-1} + Total\ Equity_t)}$$

Accruals Ratio ("AR")

3.38 Accruals Ratio is defined as follows.

$$AR = \frac{NOA_t - NOA_{t-1}}{0.5 \times (NOA_t + NOA_{t-1})}$$

Where $NOA_t = (Total\ Assets_t - Cash_t) - (Total\ Liabilities_t - Total\ Debt_t)$

Cash flow-to-Debt Ratio ("CFD")

3.39 Cash flow-to-Debt Ratio is defined as follows:

$$CFD = \frac{Cash\ Flow\ from\ Operation}{Total\ Debt}$$

Growth Factor ("GF")

3.40 Growth Factor is defined as follows:

$$GF = \left(\frac{Net\ Income_t - Net\ Income_{t-3}}{0.5 \times (Total\ Assets_t + Total\ Assets_{t-3})}\right) / \left(\frac{Price}{Book\ Value\ per\ Share}\right)$$

3.41 Accruals Ratio and Cash flow-to-Debt Ratio are not applicable to securities in the Financials industry.

3.42 For Growth Factor, the share class with the relatively lower price will be selected for factor calculation.

Winsorization

3.43 After calculating the factors for all eligible securities, extreme values would then be limited with the use of winsorization.

3.44 For each factor, all the available calculated values are ranked in ascending order. All values below the 5^{th} percentile would be set to the 5^{th} percentile and all values above the 95^{th} percentile would be set to the 95^{th} percentile.

3.45 The 5^{th} percentile is defined as the data value whose ranking equals *roundup (5% x no. of available calculated values).*

3.46 The 95^{th} percentile is defined as the data value whose ranking equals *rounddown (95% x no. of available calculated values).*

Z-Score Calculation

3.47 A Z-Score would be calculated for each winsorized factor value.

3.48 The following Z-Score formula would be applied to ROE, CFD and GF:

$$Z_{i,j} = \frac{(x_{i,j} - \mu_j)}{\sigma_j}$$

Where

$Zi,_j$ is the Z-Score of security i for factor j

$x_{i,j}$ is the winsorized value of security i for factor j

μ_j is the mean of winsorized value for factor j

σ_j is the standard deviation of winsorized value for factor j

3.49 The following Z-Score formula would be applied to AR:

$$Z_{i,j} = -\frac{(x_{i,j} - \mu_j)}{\sigma_j}$$

Where

$Zi,_j$ is the Z-Score of security i for factor j

$x_{i,j}$ is the winsorized value of security i for factor j

μ_j is the mean of winsorized value for factor j

σ_j is the standard deviation of winsorized value for factor j

3.50 In case there is no data available for a particular factor of a security, a Z-Score of 0 would be assigned.

3.51 A Z-score of -3 would be assigned to candidates with negative average equity, i.e. 0.5 x (Total $Equity_{t-1}$ + Total $Equity_t$) < 0, for the ROE Factor.

3.52 For CFD, in case the value cannot be calculated as a result of Total Debt being 0, it will be assigned the largest Z-Score calculated for the CFD Factor.

3.53 The four factor Z-Scores are averaged to compute a Quality Growth Score. If a security belongs to the Financials industry, only ROE and GF would be averaged.

3.54 If there is no data available for all four factors (two in the case of Financials company), it will be considered ineligible for constituent selection.

3.55 All eligible securities are ranked in descending order by their Quality Growth Score.

3.56 The top 50 securities will be selected as constituents of the HSBAQG.

3 Constituent Eligibility

HSBAI50

Eligible Securities

3.57 A security is eligible for constituent selection if it fulfills the following eligibility criteria.

Sector Requirement

3.58 Companies that are classified in one of the following subsectors in the Hang Seng Industry Classification System ("HSICS"):

Industry		Sector		Subsector	
05	Materials	0530	Basic Materials	053040	Specialty Chemicals
10	Industrials	1010	Industrial Engineering	101020	Industrial Components & Equipment
				101025	Electrical & Electronic Components
				101030	Environmental Engineering
				101050	New Energy Materials
				101060	Aerospace & Defense
				101070	Energy Storage Units
23	Consumer Discretionary	2310	Automobiles	231010	Automobiles
				231020	Auto Parts
		2320	Household Goods & Electronics	232020	Consumer Electronics
		2350	Media & Entertainment	235010	Advertising & Marketing
				235020	Broadcasting
				235030	Movies & Entertainment
				235040	Publishing
				235050	Interactive Media & Services
		2370	Specialty Retail	237060	Online Retailers

3 Constituent Eligibility

Industry		Sector		Subsector	
28	Healthcare	2810	Pharmaceuticals & Biotechnology	281010	Pharmaceuticals
				281020	Biotechnology
				281040	Medicine Distribution
				281050	Pharma & Biotech Contract Services
		2820	Other Healthcare	282010	Medical Devices & Supplies
				282020	Medical & Aesthetic Services
				282030	Dietary Supplements
35	Telecommunications	3500	Telecommunications	350010	Satellite & Wireless Communication
				350020	Telecommunication Services
40	Utilities	4000	Utilities	400040	Alternative/ Renewable Energy
				400050	Nuclear Energy
50	Financials	5030	Other Financials	503050	Payment Services
70	Information Technology	7010	IT Hardware	701010	Consumer Telecommunication Equipment & Components
				701015	Telecommunication Network Infrastructure
				701020	Computers & Peripherals
				701030	Robotic Systems & Solutions
		7020	Software & Services	702015	Digital Solution Services
				702025	Internet Services & Infrastructure
				702030	Application Software
				702040	Game Software
		7030	Semiconductors	703010	Semiconductors
				703020	Semiconductor Equipment & Materials

Research and Development Expense Requirement

3.59 Research and Development Expense should be greater than zero in the past two fiscal years.

R&D and Growth Factors

3.60 The following R&D and growth factors are considered for constituent selection.

R&D Expense to Sale Ratio ("RDS")

3.61 R&D Expense to Sale Ratio is defined as follows.

$$RDS = \frac{Research\ and\ Development\ Expense}{Total\ Sales}$$

R&D Growth ("RDG")

3.62 R&D Growth is defined as follows.

$$RDG = \frac{Research\ and\ Development\ Expense_t}{Research\ and\ Development\ Expense_{t-1}}$$

Return on Equity ("ROE")

3.63 Return on Equity is defined as follows.

$$ROE = \frac{Net\ Income_t}{0.5 \times (Total\ Equity_{t-1} + Total\ Equity_t)}$$

Sale Growth ("SaleG")

3.64 Sale Growth is defined as follows.

$$SaleG = \frac{Total\ Sales_t}{Total\ Sales_{t-1}}$$

Winsorization

3.65 After calculating the factors for all eligible securities, extreme values would then be limited with the use of winsorization.

3.66 For each factor, all the available calculated values are ranked in ascending order. All values below the 5^{th} percentile would be set to the 5^{th} percentile and all values above the 95^{th} percentile would be set to the 95^{th} percentile.

3.67 The 5th percentile is defined as the data value whose ranking equals *roundup (5% x no. of available calculated values).*

3.68 The 95th percentile is defined as the data value whose ranking equals *rounddown (95% x no. of available calculated values).*

Z-Score Calculation

3.69 A Z-Score would be calculated for each winsorized factor value.

3.70 The following Z-Score formula would be applied to RDS, RDG, ROE and SaleG:

$$Z_{i,j} = \frac{(x_{i,j} - \mu_j)}{\sigma_j}$$

Where

$Zi,_j$ is the Z-Score of security i for factor j

$x_{i,j}$ is the winsorized value of security i for factor j

μ_j is the mean of winsorized value for factor j

σ_j is the standard deviation of winsorized value for factor j

3.71 In case there is no data available for a particular factor of a security, a Z-Score of 0 would be assigned.

3.72 A Z-score of -3 would be assigned to candidates with negative average equity, i.e. 0.5 x (Total $Equity_{t-1}$ + Total $Equity_t$) < 0, for the ROE Factor.

3.73 The four factor Z-Scores are averaged to compute a R&D and Growth Score.

3.74 If there is no data available for all four factors, it will be considered ineligible for constituent selection.

3.75 All eligible securities are ranked in descending order by their R&D and Growth Score.

3.76 The top 50 securities will be selected as constituents of the HSBAI50.

3.77 If the A-shares listing and H-shares listing of a dual-listed company fulfill the turnover requirement, only A-shares will be included in the HSBAI50. Otherwise, only the class of shares that fulfill the turnover requirement will be included in the HSBAI50.

HSBAHD

Listing History Requirement

3.85 Eligible securities should have been listed for at least one year, starting from the listing date to the review cut-off date (both dates inclusive), in order to be considered in the index review.

Dividend Record Requirement

3.86 Securities from the eligible list should have a cash dividend paid record of at least three consecutive fiscal years.

Dividend Payout Requirement

3.87 Dividend Payout Ratio of eligible securities as at the latest complete fiscal year should be positive and at most 100%.

Constituent Selection

3.88 Securities which meet the below two conditions will be screened out:

- Price dropped by more than 50% over the past 12 months; and
- Last 12-month price performance ranked in the bottom 10% of the eligible candidates.

3.89 HSIL reserves the right to remove a candidate's index eligibility if it carries abnormally high dividend yield.

3.90 Securities satisfying all eligibility criteria will be ranked in descending order by net dividend yield, which is calculated using the following formula:

$$\begin{array}{c}\textit{Net dividend yield} \\ \textit{for selection}\end{array} = \frac{\textit{Dividend per share after deducting withholding tax (if applicable)}}{\textit{Price at review cut-off date}}$$

3.91 Dividend per share refers to the trailing one-year cash dividend that has gone ex-dividend, i.e. total dividend for the latest two (or four) periods if a security pays dividends bi-annually (or quarterly), as at the review cut-off date.

3.92 Any security (non-existing constituent) which has changed fiscal year-end date within 12 months to the review cut-off date, will be excluded from constituent selection. For an existing constituent which has changed fiscal year-end date within 12 months to the review cut-off date, the dividend of the latest complete fiscal year will be used for yield calculation.

3 Constituent Eligibility

3.93 If a security bears a net dividend yield of above 7%, its yield will be reviewed and recalculated to exclude one-off cash distributions, if any.

3.94 If the A-shares listing and H-shares listing of a dual-listed company fulfill the turnover requirement, the share class with the relatively higher net dividend yield will be selected. Otherwise, only the class of shares that fulfill the turnover requirement will be selected.

3.95 The top 50 securities in terms of net dividend yield will be selected as constituents of the HSBAHD.

4 Index Review and Constituent Changes

Regular Half-Yearly Review

4.1 HSIL undertakes regular half-yearly reviews of constituents of the Hang Seng Stock Connect Greater Bay Area Index Series with data cut-off date of the end of June and the end of December each year.

4.2 A half-yearly review is normally completed within eight weeks after the data cut-off dates.

4.3 Constituents will be selected according to their respective selection criteria as stated in Section 3 of this Index Methodology.

Buffer Zone

4.4 Fixed Constituents Number Indexes:

Existing constituent companies ranked below "*Lower Limit*" will be removed while non-constituent companies ranked "*Upper Limit*" or above will be included.

In case the number of incoming companies is greater than the number of outgoing constituent companies, constituent companies with the lowest rank* will be removed from the index in order to maintain the number of constituent companies at *"number of constituents",* vice versa.

Indexes	Lower Limit	Upper Limit	Number of constituents
HSGBAC	300	200	250
HSBAQG HSBAI50 HSBAHD	60	40	50

* The rank refers to the corresponding index constituent selection methods

Special Case (HSBART):

Existing constituent companies ranked below 12th in each region will be removed while non-constituent companies ranked 8th or above will be included.

If the number of incoming companies is greater than the number of outgoing constituent companies, constituent companies with the lowest combined rank will be removed from the index in order to maintain the number of constituent companies at 10 in each region, vice versa.

4 Index Review and Constituent Changes

Reserve List

4.5 The purpose of the Reserve Lists is to replace any outgoing constituent company between regular reviews in cases where a constituent company may be removed due to stock suspension or delisting.

Indexes	Reserve List
HSGBAC	The ten non-constituent stocks of the HSGBAC with the highest total MV rank will form a Reserve List for the HSGBAC.
HSBART	The non-constituent stock with the highest combined rank in each region will fall into a Reserve List.

Effective Date

4.6 Effective date of constituent changes will be the next trading day after the second Friday of September and March for the half-yearly reviews for data cut-off date of the end of June and the end of 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 before the effective date.

ST/*ST Treatment

4.7 If the A-share of a constituent company has been classified as ST/*ST stocks, the subject company will be removed from the index and the replacement will be identified from the Reserve List. The corresponding constituent changes will be effective on the regular monthly rebalancing date of the following month.

Trading Suspension

4.8 Any constituent that has been suspended from trading 1) due to bankruptcy / regulatory investigation, or 2) for three months will be removed from the index as soon as possible. Such constituent may be retained in the index only in exceptional circumstances if it is believed that its shares are highly likely to resume trading in the near future. Please refer to the Index Operation Guide for details.

4 Index Review and Constituent Changes

High Shareholding Concentration

4.9 Companies with High Shareholding Concentration* will not be eligible for inclusion in the Hang Seng Stock Connect Greater Bay Area Index Series unless they have satisfied the conditions to regain eligibility for constituency as stated in the Index Operation Guide for managing the Hang Seng Family of Indexes.

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

Ad Hoc Changes

4.10 A constituent company may be removed from the Hang Seng Stock Connect Greater Bay Area Index Series if it is not eligible for Northbound or Southbound trading under the Stock Connect scheme in between regular half-yearly review. Replacement would be made with reference to the Reserve List in section 4.5.

4.11 If a constituent of the Hang Seng Stock Connect Greater Bay Area Index Series is removed from the HSGBAC between regular reviews due to delisting or suspension, such constituent will also be removed from the Hang Seng Stock Connect Greater Bay Area Index Series on the same removal schedule as for the HSGBAC.

4.12 If a stock is added to the HSGBAC between regular reviews due to replacement, such stock will also be added to the Hang Seng Stock Connect Greater Bay Area Index Series except HSBAQG, HSBART, HSBAI50 and HSBAHD on the same addition schedule as for the HSGBAC.

5 Index Calculation

5.1 The Hang Seng Stock Connect Greater Bay Area Index Series is freefloat-adjusted MV weighted.

Indexes	Cap Level
HSGBAC HSBAF HSBAIT HSBAI HSBAPC HSBACG HSBACS HSBANE HSBAIN HSBAQL HSBART	10% cap on individual companies
HSBAQG HSBAI50	10% cap on individual securities

5.2 The HSBAHD is net-dividend-yield weighted. At each index rebalancing, the weighting for each constituent is capped at 10%.

5.3 Index calculation formula

The formula is set out as below:

$$Current\,Index = \frac{\sum_{i=1}^{n}\sum_{j=1}^{m}(P_{i,t}^{j} \times \frac{1}{FX_{t}^{j}} \times IS_{i}^{j} \times FAF_{i}^{j} \times CF_{i}\ )}{\sum_{i=1}^{n}\sum_{j=1}^{m}(P_{i,t-1}^{j} \times \frac{1}{FX_{t-1}^{j}} \times IS_{i}^{j} \times FAF_{i}^{j} \times CF_{i}\ )} \times Yesterday's\ Closing\ Index$$

$P_{i,t}^{j}$	=	*Price of j-class shares of Company i at time t* *(j-class: A-shares & HK-listed shares)*
IS_{i}^{j}	=	*Total issued j-class shares of Company i*
FAF_{i}^{j}	=	*Freefloat adjusted factor of j-class shares of Company i*
CF_{i}	=	*Capping Factor on Company i*
FX_{t}^{j}	=	*Foreign Exchange Rate of a traded currency of j-class shares vs. USD at time t*

5.4 The Hang Seng Stock Connect Greater Bay Area Index Series 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 second 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 rebalance.

7 Dissemination

7.1 The Hang Seng Stock Connect Greater Bay Area Index Series is calculated and disseminated real-time every 2 seconds during trading hours on each trading day of either the Hong Kong or the mainland China stock markets.

7.2 The Hang Seng Stock Connect Greater Bay Area Index Series is calculated and published in Renminbi.

7.3 Vendor codes for the Hang Seng Stock Connect Greater Bay Area Index Series:

	Price Index		**Total Return Index**		**Net Total Return Index**	
Indexes	Bloomberg	Thomson Reuters	Bloomberg	Thomson Reuters	Bloomberg	Thomson Reuters
HSGBAC	HSBBAC	.HSBBAC	-	.HSBBACT	-	-
HSBAF	-	.HSBAF	-	.HSBAFT	-	.HSBAFN
HSBAI	-	.HSBAI	-	.HSBAIGT	-	.HSBAIIN
HSBAPC	-	.HSBAPC	-	.HSBAPCT	-	.HSBAPCN
HSBACG	-	.HSBACG	-	.HSBACGT	-	.HSBACGN
HSBACS	-	.HSBACS	-	.HSBACST	-	.HSBACSN
HSBANE	-	.HSBANE	-	.HSBANET	-	.HSBANEN
HSBAIN	-	.HSBAIN	-	.HSBAINT	-	.HSBAINN
HSBAQL	-	.HSBAQL	-	.HSBAQLT	-	.HSBAQLN
HSBART	-	.HSBART	-	.HSBARTT	-	.HSBARTN
HSBAQG	-	.HSBAQG	-	.HSBAQGT	-	.HSBAQGN
HSBAI50	HSBAI50	.HSBAI50	-	.HSBAI50T	-	.HSBAI50N
HSBAHD	-	.HSBAHD	-	.HSBAHDT	-	.HSBAHDN

8 Contact Information

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