HSBC

Asian Local Bond Index (ALBI)

Asia

Factsheet:

- The HSBC Asian Local Bond Index (ALBI) tracks the total return of liquid bonds, denominated in local currencies, in China, Hong Kong SAR, India, Indonesia, South Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.
- Non government issues, which currently only carry a small weighting in the ALBI and are mainly restricted to quasi-government issues, are included in our Hong Kong SAR, Malaysia, Singapore, Thailand sub-index and the ALBI.
- The index constituents' selection criteria for each country and country weightings for the ALBI are set to balance the desire for liquidity and stability. While each individual local bond index is designed to serve the needs of both domestic and external investors, the ALBI is created to serve international investors' needs for a regional benchmark index for domestic bond markets and assist their global asset allocation decisions.

Market development

Local currency bond markets took off rapidly after the 1997-98 Asian crisis as governments around the region recognised the importance of strengthening their financial sectors to make them less vulnerable to future financial crises. The most important issue to address is to reduce the concentration of corporate risk in the banking sector. In many cases, capital markets provide far better transparency, liquidity, price discovery and risk-sharing, attributes that are largely unavailable in the region's banking sector. In addition, is offers borrowers access to longer-term funding.

Financial disintermediation is becoming apparent in Asia, as the proportion of Asian local currency bonds outstanding versus commercial bank loans (ex-China) has risen from 50% during the Asian crisis in 1998 to 85% today. Much of the drive came from the government sector in response to the crisis. Governments across the region have been running large budget deficits (averaging 3% of GDP since the Asian crisis) while in Korea, Thailand and Indonesia, bank recapitalisations have resulted in a massive build-up in public sector debt. Asia's vast pool of savings and the greater desire for safer investment by regional investors, (as Asia encountered deflationary pressures after the crisis) also contributed to the development of the local currency bond market.

In response, Asian governments took the opportunity to develop their bond markets. Most of the markets in the region now have 'risk-free' yield curves extending to at least 10 years. Liquidity and transparency have made steady improvements as better market infrastructure was put in place (eg, the introduction of book-entry and delivery-versus-payment systems, the development of repo, bond futures and interest rate derivative markets). The introduction of mark-to-market rules have also encouraged more active trading while the liberalisation of interest rates (by varying amounts in each market) has allowed the yield curve to be driven

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more by market forces. Trading volume in Asian government securities (excluding China and Japan) has risen markedly with the average turnover ratio[1] currently at 9 compared to 30 in the US, although turnover ratios vary significantly from as low as 0.5 in the Philippines to as high as 45 in Taiwan.

However, development in Asia's corporate bond markets continues to lag. Corporate issues still form a small proportion (approximately one-third) of the total debt outstanding, although the figure is higher in more developed markets with a strong public sector (eg, Hong Kong and Singapore). Corporate debt market remains plagued by poor liquidity and transparency due to small issue sizes, lack of credible ratings systems, and market practices and infrastructure that inhibit liquidity. As a result, most of the corporate bond markets often do not price credit risk efficiently. Turnover ratios remain relatively low at 1.5-2.0, even in Asia's more developed corporate bond markets, such as Hong Kong and Singapore (significantly lower than their respective government bond markets). Access to the corporate bond market tends to be limited to higher quality issuers. Key factors in developing the corporate bond market include improving the government benchmark yield curve and developing a more transparent legal infrastructure.

The Asian Local Bond Index (ALBI)

To satisfy growing interest in Asia's local currency bond market, HSBC launched the HSBC Asian Local Bond Index (ALBI) in January 2002. The index has since, undergone several changes in light the market's rapid development, in particular, the inclusion of China and Indonesia in the overall ALBI. The ALBI currently tracks the US dollar total return performance of liquid domestic bonds, denominated in local currencies, in China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.

Determining ALBI country weightings

An ideal index should be broadly representative, liquid (replicable) and stable. Although the quality of an index is ultimately determined by the quantity of the underlying securities and market structures, the construction rules do affect index quality. The majority of the local bond markets represented by the ALBI are in their infancy. As such, balancing representativeness, liquidity and stability is challenging, but important. For example, passively managed funds and insurance companies would put more weight on the stability of index composition, while actively managed funds and securities houses care more for liquidity in terms of low transaction costs and speedy execution of both current and future investments.

The weighting of individual bonds in each local index are determined by their market capitalisation. However, their respective country weightings in the ALBI, which are set periodically (twice a year) by HSBC, affect their final index weightings. Because the local bond market structures vary so dramatically between countries, standard metrics such as total market size or market capitalisation of each local index fail to provide an approximate of investment opportunities available to international investors. The ALBI's weightings are derived from the following factors:

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[1] Turnover ratio derives from annual turnover divided by current amount outstanding. It excludes repo transactions.

1. Total size of each domestic debt market

2. Liquidity in the secondary bond market in each country; both from a trading perspective measured by turnover ratios, and from an investing perspective, measured by how much investors can purchase on an average day across the yield curve with reasonable ease and without an adverse price impact

3. Accessibility to foreign investors in terms of capital/foreign exchange restrictions, the ease of setting up and operating foreign-owned investment funds. The development of infrastructure that is conducive to fixed-income investments and trading, such as the availability of domestic benchmark yield curves, settlement and clearing system, derivatives products (swaps and futures) and a reliable credit rating system for non-government issues. All these are measured by our proprietary market impediment index.

The following table summarises the contribution of size, liquidity and market impediments in the determination of ALBI's economy weightings[2].

1. Deriving ALBI's sub-sector weighting

Country	Size (USDbn)*	Turnover ratio	Buying volume in a single day (USDm)^	Impediments index	Overall weighting (%)
China	205.3	0.7	12.1	12	8.2
HKSAR	62.7	10.6	192.3	100	12.3
India	171.5	4.1	133.3	30	10.1
Indonesia	45.3	1.2	11.6	68	5.9
Malaysia	48.5	1.6	26.3	65	6.1
Philippines	15.3	0.5	6.4	54	3.9
Singapore	72.4	9.5	58.8	97	10.7
South Korea	213.5	7.9	862.1	45	21.4
Taiwan	78.7	45.4	150.2	38	15.6
Thailand	37.3	3.2	12.5	66	5.9

** Government only for China, India, Indonesia, Korea, the Philippines and Taiwan; government and quasi-government only in Thailand and Malaysia; government and non-government included for HK and Singapore.*
^ An estimate of how much an offshore investor can buy across the yield curve on an average day with reasonable ease and without large adverse price impact.
Souce: HSBC

Principles underlying market impediments index

1. Relative order of magnitude of each factor is the key driver of impediment index e.g. capital control where access is prohibited carries more weight than withholding tax where net return is reduced.

2. Relative ranking instead of absolute score is what matters – Hong Kong SAR sets the ceiling.

3. "Roughly right" is preferred to "precisely wrong" in the scoring process, i.e. judgements supercede mechanical formulaes.

[2] Size, liquidity and accessibility are all given equal weighting in determining the economy weightings: {(Size) X 1/3 + [(Turnover ratio) X 1/6 + (Buying volume on an average day) X 1/6] + Impediments index X 1/3}

4. The impediments index is converted or normalised to a weighting (see Figure 2).

2. Computational procedures for the ALBI index weighting

	Normalised Size (amount outstanding)**	Normalised turnover ratio	Normalised buying volume	Normalised Impediments index	Overall weighting
Factor weighting	***0.33***	***0.17***	***0.17***	***0.33***	***1.00***
China	21.6%	0.9%	0.8%	2.1%	8.2%
HKSAR	6.6%	12.5%	13.1%	17.4%	12.3%
India	18.0%	4.8%	9.1%	5.2%	10.1%
Indonesia	4.8%	1.4%	0.8%	11.8%	5.9%
Malaysia	5.1%	1.9%	1.8%	11.3%	6.1%
Philippines	1.6%	0.6%	0.4%	9.4%	3.9%
Singapore	7.6%	11.2%	4.0%	16.9%	10.7%
South Korea	22.5%	9.3%	58.8%	7.7%	21.4%
Taiwan	8.3%	53.6%	10.2%	6.7%	15.6%
Thailand	3.9%	3.8%	0.9%	11.5%	5.9%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

** Normaized factor valued derived by dividing factor value by country-sums (e.g. for China size factor: 21.6% = 203.5/950.5)*
Source: HSBC

Rules of construction and calculation methodology for the ALBI

Tables below summarise construction rules and calculation methodology for the ALBI. We also provide summarised characteristics of each domestic bond market.

3. Constituent Selection Criteria

Markets	China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand
Currency	Respective domestic currencies. The composite ALBI index is calculated based on the daily return of each sub-country index in US dollar
Coupon Type	Fixed rate only
Bond Types	Government, quasi-government and corporate bonds
Credit ratings	Restrictions based on individual country
Issue size	Minimum issue size is required and it varies across countries
Maturity	Minimum of one year remaining maturity

Source: HSBC

4. Index Computation Methodology

Return Calculation	Total Return, including price changes, and accrued and re-invested coupon payments. Each country sub-index is first calculated after closing of each market. The index is calculated as the cumulative value of the sum of the weighted daily total return of each sub-index, relative to 100
Index base	31-Dec-1999 = 100
Weightings	Weightings of individual bonds within each local index are determined by their market capitalisation. Economy weightings are determined and reviewed semi-annually that represent a local bond portfolio largely replicable by external investors.
Coupon reinvestment*	Coupon reinvested back to Economy index at time cash is received
Index rebalancing	Re-balancing of the composition of each sub-index are made on the first business day of each month
Statistics available	Total return, yield, modified duration, average life, market capitalisation, average clean price, average coupon

**Alternatively, coupon could be held in cash and re-invested at month-end*
Source: HSBC

5. China: Rules of Index Construction and Calculation Methodology

Issuer	China government
Currency	Chinese yuan (CNY)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	CNY 10 billion
Maturity	Minimum one year remaining maturity
Listing requirement	All government issues listed on the Shanghai Stock Exchange
Selection criteria for index constituents	Bonds satisfying all of the above criteria
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one year are removed
Pricing	Bid prices quoted on the Shanghai Stock Exchange
Business day	Index is updated on every Hong Kong business day. In case of China holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI China index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

6. Hong Kong: Rules of Index Construction and Calculation Methodology

Issuer	Hong Kong government, quasi-government, supranational, banks and corporates
Currency	Hong Kong Dollar (HKD)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	HKD 300 million
Maturity	Minimum one year remaining maturity
Credit rating for non-governments	Single A or equivalent
Selection criteria for index constituents	Bonds satisfying all of the above criteria.
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one year are removed
Pricing	Market closing prices for government issues (HKEFN) published by HKMA. Individually priced (based on bid spreads & mid-HIBOR rates) by traders at HSBC Hong Kong treasury office for non-government around Hong Kong market closing time
Business day	Index is updated on every Hong Kong business day.
Index base	31 December 1993 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI Hong Kong index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

7. India: Rules of Index Construction and Calculation Methodology

Issuer	India government
Currency	Indian Rupee (INR)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	INR 50 billion
Maturity	Minimum one year remaining maturity
Liquidity criteria	Average daily turnovers during the past month as established from the transaction data released by RBI on a daily basis
Number of bonds in each maturity band	
1-5 years	3-4
5-10 years	4-6
10+ years	4-6
Selection criteria for index constituents	Bonds satisfying all of the above criteria with the highest average daily turnovers in the most recent month are selected. The total number of bonds may vary within the maturity band defined above.
Index rebalance	The index portfolio is re-balanced at the beginning of each month, taking into account of new issues and changes in liquidity
Pricing	Individually priced (bids) by traders at HSBC India treasury office around India market closing time
Business day	Index is updated on every Hong Kong business day. In case of India holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI India index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

HSBC

8. Indonesia: Rules of Index Construction and Calculation Methodology

Issuer	Indonesia government bond, including recapitalisation bond
Currency	Indonesian Rupiah (IDR)
Bond type	Fixed-rate straight bonds only
Minimum amount outstanding	IDR2trn
Maturity	Minimum one-year remaining
Credit restrictions	None
Selection criteria for index constituents	Bonds satisfying all of the above criteria.
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one year are removed
Pricing	Bid prices from IDMA (Inter Dealer Market Association)
Business day	Index is updated on every Hong Kong business day. In case of Indonesian holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI Indonesia index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments.
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

9. South Korea: Rules of Index Construction and Calculation Methodology

Issuer	Korea government, mainly Korea treasury bonds (KTB), Korea monetary stabilization bonds (MSB) and FX stablisation bonds
Currency	Korea Won (KRW)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	KRW 1 trillion.
Maturity	Minimum one year remaining maturity
Selection criteria for index constituents	Bonds satisfying all of the above criteria. All fungible bonds are included even if their initial issue size is less than KRW 1 trillion. However, if the total size of a fungible bond does not reach KRW 1 trillion by the last issuance tranche, it will be removed from the index
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one year or issue sizes less than KRW 1 trillion are removed
Pricing	Closing prices by KBPM (Korea Bond Pricing & Korea Management Consulting Credit Company)
Business day	Index is updated on every Hong Kong business day. In case of Korea holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI India index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

10. Malaysia: Rules of Index Construction and Calculation Methodology

Issuer	Malaysian government and quasi-government (mainly Danamodal, Danaharta, Cagamas and Khazanah), and corporate bonds
Currency	Malaysian Ringgit (MYR)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	MYR 2 billion for governments and MYR 500 million for non-governments
Maturity	Minimum one year remaining maturity
Credit rating for non-governments	A- and above rated by RAM, A3 or above by Moody's and A- or above by S&P or equivalent
Selection criteria for index constituents	Bonds satisfying all of the above criteria.
Index rebalance	The index portfolio is re-balanced at the beginning of each month, taking into account of new issues and changes in liquidity
Pricing	Individually priced (bids) by traders at HSBC Malaysia treasury office around Malaysian market closing time
Business day	Index is updated on every Hong Kong business day. In case of Malaysian holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI Malaysia index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

11. Philippines: Rules of Index Construction and Calculation Methodology

Issuer	Philippine government
Currency	Philippine Peso (PHP)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	PHP 3 billion
Maturity	Minimum one year remaining maturity
Selection criteria for index constituents	Bonds satisfying all of the above criteria.
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one years are removed.
Pricing	MART (Money Market Association of the Philippines) that updates government bond prices daily at 11.16am
Business day	Index is updated on every Hong Kong business day. In case of Philippine holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI Philippine index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments. All return calculations take into account the 20% withholding tax, calculated based on bond yields which are applied to all market participants.
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

12. Singapore: Rules of Index Construction and Calculation Methodology

Issuer	Singapore government, quasi-government, supranational and corporate
Currency	Singapore dollar (SGD)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	SGD 1.5 billion for governments and SGD 500 million for non-governments
Maturity	Minimum one year remaining maturity
Credit rating for non-governments	No rating restrictions
Selection criteria for index constituents	Bonds satisfying all of the above criteria.
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one years are removed.
Pricing	Closing prices published by MAS for government bonds; HSBC's on MAS website and Bloomberg page around 5:30pm. Individually priced by traders at HSBC Singapore treasury office for non-government around Singapore market closing time
Business day	Index is updated on every Hong Kong business day. In case of Singapore holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI Singapore index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments. Individually priced (bids) by traders at HSBC Singapore treasury office around Malaysian market closing time
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

13. Taiwan: Rules of Index Construction and Calculation Methodology

Issuer	Taiwan government
Currency	Taiwan Dollar (TWD)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	TWD 30 billion
Maturity	Minimum one year remaining maturity
Selection criteria for index constituents	Bonds satisfying all of the above criteria.
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one years are removed.
Pricing	Closing prices by TOTC (Taiwan GreTai Market)
Business day	Index is updated on every Hong Kong business day. In case of Taiwan holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI Taiwan index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments.
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

14. Thailand: Rules of Index Construction and Calculation Methodology

Issuer	Thai government, quasi-government and corporate
Currency	Thai Baht (THB)
Bond type	Fixed-rate straight bonds
Minimum amount outstanding	THB 20 billion
Maturity	Minimum one year remaining maturity
Credit restrictions	A- or above (rated by TRIS)
Selection criteria for index constituents	Bonds satisfying all of the above criteria.
Index rebalance	At the beginning of each month, new issues satisfying the selection criteria are included while current constituents with remaining maturity less than one years are removed.
Pricing	TBDC (Thai Bond Dealing Center) that updates closing prices around 5:30pm
Business day	Index is updated on every Hong Kong business day. In case of Thai holiday, index return will reflect coupon accrual only
Index base	29 December 2000 = 100
Weighting of individual bonds	Total daily market capitalization
Coupon reinvestment	Coupon reinvested back to the ALBI Thailand index at time cash is received
Return calculation	Total return which includes capital gains, accrued interests and coupon reinvestments. .
Available statistics	Total return, average yield, average modified duration, average life, market capitalization, average clean price (net capital gains/losses), average coupon

Source: HSBC

Appendix

Elements of market impediments:

1. Difficulties in accessing each market varies across the region. In some countries like Hong Kong SAR, Singapore, Indonesia and Malaysia, regulatory approval is not required. However in China, stringent QFII qualification are required while in India, in light of burgeoning FX reserves, no new FII applications have been entertained for some time under the 100% debt route.

2. Capital account restrictions complicated the process of repatriating interest income and capital gains. Majority of the countries in the region require withholding tax to be paid before repatriation while others required approval from authorities.

3. Cost of appointing a local custodian can make investments unattractive.

4. Withholding tax is present in most Asian markets, complicates and raises the overall cost of investing.

15. Withholding tax liabilities on Asian local currency bonds

Country	Tax rates
China	CGT: 5% business tax, 33% profit tax; Interest tax 33%, none if held to maturity
Hong Kong	0% tax on government and multi-lateral agency securities; 16% or 17.5% profit tax on others
India	CGT: Short-term (<1yr) 30%; Long-term (>1yr) 10%, Interest 20%
Indonesia	CGT 20%. Interest 20%. Interest income tax deducted from accrued interest
South Korea	CGT and interest 27.5%. Interest income tax deducted from accrued interest
Malaysia*	CGT 0%. Interest 15%. No tax on zero-coupon bonds
Philippines	Uniform 20% WHT on interest applies. Based on net price principal to eliminate the impact of higher taxes on higher coupon bonds
Singapore	Tax free from Qualifying Debt Securities
Taiwan	CGT 0%. Interest 20%. Interest tax deducted from accrued interest
Thailand*	CGT 15%. No interest for government or government guaranteed debt, 15% otherwise. Tax applies to zero coupon bonds.

Tax on interest income generally based on coupon receipts, except the Philippines.
** Tax on interest payments can be avoided by selling the bonds before coupon has been paid, but the holder must make full tax payment on date that coupon is paid (even if interest has not been received).*
Source: HSBC

5. Trading size can also be an impediment. Example in Korea, the average dealing size for government bonds is in round lots of KRW10bn.

6. Market infrastructure – e.g. settlement and clearing system, transparency of prices, availability of benchmark yield curve and hedging tools.

16. ALBI, deriving impediments score

	HK	Spore	Indo	Thai	Malay	Philip	Korea	Taiwan	India	China
Currency/capital restrictions	**30**	27	21	21	19	12	12	9	5	0
Ease of setting up and operating foreign owned investment fund	**15**	15	13	10	12	10	5	3	2	0
WHT - complexity and the amount	**20**	20	13	13	13	13	4	7	3	3
Infrastructure - settlement and custodian	**15**	15	11	10	11	9	11	10	11	8
Other infrastructure factors - derivative markets, hedging, transparency, pricing	**20**	20	10	12	10	10	13	10	10	2
Scoring	**100**	97	68	66	65	54	45	38	30	12

Hong Kong SAR benchmark at 100, 0 = most difficult to access, 100 = easiest to access
Source: HSBC

Exact procedure for deriving the economy weighting

1. Normalise market size, turnover ratio, buying volume on an average day and impediment index to a unit-free or percentage scale

2. Economy allocations is computed according to

{(Size) X 1/3 + [(Turnover ratio) X 1/6 + (Buying volume on an average day) X 1/6] + Impediments index X 1/3}

Size = Outstanding amount

Turnover ratio = Annual market turnover / Outstanding amount

Maximum amount of bonds one can buy across the yield curve with ease of execution and without large adverse price movements

Impediments index = function of (ease of accessing each market, regulatory approvals, FII limits, cross-border tax, accounting and legal issues, deal size, market spreads, capital account restrictions, derivative markets etc). The Index for Hong Kong is set at 100 as the ceiling.

3. Liquidity and impediments are ongoing and pre-entry transaction costs, respectively with the latter currently carrying more weight, demonstrated by lack of cross-border investments.

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