

HSBC Asian USD Bond Index (ADBI)

Asia

Questions and Answers

1. Could you briefly describe what the ADBI is and what countries are included?

The ADBI stands for the HSBC Asian US Dollar Bond Index which tracks the total-return performance of a non-Japan Asian bond portfolio consisting of US dollar-denominated, fixed-rate, straight bonds satisfying a set of simple issue size and liquidity criteria. Eight countries/regions are currently included in the ADBI. They are China (12.8%), the Hong Kong SAR (14.5%), Indonesia (1.6%), Korea (38.6%), Malaysia (16.6%), the Philippines (11.1%), Singapore (2.4%) and Thailand (2.4%).

2. Why do investors need the ADBI?

There are two aspects to this question, namely: a) why an index is useful, and b) what's special about the ADBI. In any developed market, whether debt or equity, market indices are indispensable tools that allow investors to track, measure and improve their investment performances. The ADBI provides a diagnostic tool for identifying value added or lost in an investment process exclusively focused on the Asian bond market. The historical performance of the ADBI, which dates back to 31 December 1996, shows weak correlations in daily, weekly and monthly returns with other major indices, such as:

- a) The JP Morgan EMBI+ for emerging market debt instruments;
- b) The Morgan Stanley MSEFFE, which tracks the emerging free Far East equity performance; and
- c) Indices that track the performance, in US dollars, of bonds in major developed countries such as the United States, Japan and Germany.

Based on historical data, the non-Japan Asian bond sector represented by the ADBI is demonstrated to be a unique asset class, which would notably improve the risk/return profiles of almost any globally based portfolio.

3. Why is HSBC launching the ADBI at this time?

Overall, the non-Japan Asian debt market is still in its infancy in terms of size and liquidity. It is extremely difficult to build a consistent (rule-based) and replicable index based on a pool of illiquid and unpredictable assets. However, we at HSBC are foreseeing tremendous growth in the non-Japan Asian debt market in coming years as a result of recent initiatives taken by governments and financial institutions in the region. In fact, the Asian debt market never stopped growing even during much of the Asian crisis period. For example, the ADBI, under the same construction rules, has grown from 45 constituents with a total face amount

Fixed Income

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of US\$16.06 billion on the inception date, 31 December 1996, to 76 issues with a total face value of US\$40.80 billion in two and half years.

We believe that the critical mass is building for an Asian bond index because

- a) The relatively liquid sector tracked by the ADBI has more than doubled in number of issues and nearly tripled in total face value since 31 December 1996.
- b) An unbiased liquidity adjustment necessary for producing a replicable index can be made periodically given the existence of a large number of active market participants.

HSBC believes launching the ADBI will contribute to our overall objective of promoting investors' interests in, and the development of, the non-Japan Asian bond market.

4. What is the most important factor in the index selection criteria?

Liquidity. The quality or usefulness of an index is constrained by the liquidity of its constituents. As mentioned earlier, the liquidity in the non-Japan Asian bond market is still quite limited. Because of that, virtually all of our index selection criteria are, if you will, liquidity-centric. That is why only US dollar-denominated, fixed-rate, straight bonds are currently included in the ADBI. Moreover, in index computation, all constituents and country-based sub-indices are weighted by their respective (liquidity-adjusted) market value, instead of other alternatives, such as GDP or external trade value. We believe relative market value best represents the relative liquidity of each sector.

5. Why is India, a country that has several USD-denominated issues, not included?

It is critically important that an index follows simple and objective rules that are well defined, ex-ante, so that investors are able to predict potential changes in index compositions. In constructing an index, some desirable characteristics may have to be sacrificed to ensure that others are met. India currently does not have any straight bonds that have a minimum issue size of USD250 million or above. To include India, we would have to

- (a) Lower the minimum size to US\$150 million or to US\$200 million and abandon the straight bond requirement. In both cases a large number of illiquid bonds from other countries would be included, which would reduce the effectiveness of using issue size as a simple and objective screening device for liquidity.
- (b) Treat India as a special case, which is similar to over-riding the index rules by exercising HSBC's discretion. We are extremely reluctant to make arbitrary use of any discretion which may serve the current needs of some investors but that, inevitably, would make the composition of the index far less predictable and stable in the future. For exactly the same reason, several relatively liquid FRNs and non-plain-vanilla bonds are not included to preserve the integrity of the index rules.

This does not preclude Indian bonds entering the index at a future stage, as long as any fresh issues meet the criteria set out for inclusion.

6. What is the most important advantage HSBC has in providing such an index?

HSBC is one of the biggest and most committed market makers for non-Japan Asian bonds. The rich data we have speaks for itself. The ADBI, which dates back to 31 December 1996, covers the performance of the non-Japan Asian debt market over the entire boom, bust and recovery period. Although the ADBI is built on a relatively illiquid pool of assets, our index methodology still preserves the importance of rules and liquidity that makes the index accurate and predictable.

7. Where can investors find ADBI results?

Daily ADBI results, which include the levels of the ADBI and its sub-indices, can be found on Bloomberg (type HSBI <Go>). They can also be found in the following sources: Reuters (page HSBCI), Bridge (page 888), Telerate (page 2795), Wilshire Axiom, HSBC web page at (www.markets.hsbc.com) and major financial newspapers around the world.

8. How can investors perform analyses using the ADBI?

HSBC will give selected clients access to more index information on Bloomberg. These clients can find the following:

- a) Index constituents, their liquidity rankings and weightings in the ADBI and sub-indices;
- b) Index characteristics, such as index duration, yield, and index spreads and price performance;
- c) Customised total return performances in alternative currencies and relative performances of different sectors; and
- d) Historical volatility, etc.

HSBC uploads its index data on the Wilshire Axiom system on a daily basis. Investors who subscribe to the Wilshire service can directly perform advanced analyses using the ADBI, such as attribution analysis and customised portfolio optimisation. Upon clients' request, HSBC could also provide such analyses for clients. Although only the ADBI and its country-based sub-indices are published daily, customised indices, such as those based on maturity ranges or those with country weighting or credit rating constraints, can be provided upon request.

In terms of the performance of the index, the ADBI has posted the following returns: -7.68% in 1997, 11.15% in 1998 and 6.25% year to date (10 August 1999). Since the ADBI's base date, 31 December 31 1996, it has outperformed the EMBI+ on a cumulative basis with a much lower volatility.

9. All of your index constituents have credit risks. Why are credit rating restrictions not imposed as member selection criteria?

We chose not to impose credit rating restrictions for the following three reasons:

- a) For non-Japan Asian countries, sovereign debt ratings are very heterogeneous, ranging from Aa1/AAA (Singapore) to B3/CCC+ (Indonesia). Any meaningful restrictions would rule out a few important countries.
- b) Recent history in Asia shows extremely volatile rating changes. Any credit rating restrictions would make the index extremely unstable and unpredictable.
- c) In non-Japan Asia, debt rating is a very poor indicator of the size and liquidity of each debt market, i.e. debt rating is a poor screening device for liquidity.

10. Could you explain HSBC's approach for liquidity ranking? Why is it necessary and important?

Each index constituent is assigned one of three liquidity rankings: 1.0, 0.5 or 0.0. The ranking, subject to quarterly review, is used to discount each constituent's impact on the index. In effect, the final weighting of a bond is determined by its liquidity-weighted market value.

Ideally, liquidity should be defined in objective and quantifiable terms, such as bid-offer spreads (adjusted for duration) and trading volume, etc. Unfortunately, for most of the credit products, including benchmark issues in the non-Japan Asian countries, no reliable information or statistics are readily available (and probably will not be in the near future).

Given the importance of liquidity, and the lack of any liquidity of many of the index constituents, making no adjustment for this criterion would result in some of the illiquid bonds adversely impacting the level of the ADBI. That is, illiquid bonds, with less reliable and meaningful price data, could end up carrying weights higher than they deserve.

Under this constraint, HSBC has adopted an innovative and pragmatic approach in dealing with the liquidity issue, one that appropriately discounts the impact of illiquid issues on the level of the ADBI.

11. How subjective is HSBC's method of ranking liquidity? How is the liquidity ranking process organised and executed?

There does not exist any simple measure for liquidity. Only aspects of liquidity, such as market breath (bid-ask spreads), depth (maximum tradable size at bids and asks) and resilience (speed at which prices restore to its previous levels after a non-value based trade) can be measured. Our challenge is to rank liquidity in the absence of consistent statistics on aspects of liquidity. HSBC will appoint an independent agency to organise a quarterly review of liquidity ranking for index constituents. The agency will distribute a list of published criteria (shown below) two weeks prior to the quarter end to qualified financial institutions in the non-Japan Asian bond market. It will announce the revised liquidity ranking based on the average results (with related participant profiles) at each quarter end. Although the ranking criteria, inevitably, could carry subjective opinions based on some proprietary information, the execution process is completely independent, transparent and objective, and free of any potential manipulation.

The following describes the liquidity ranking and the criteria used by participating financial institutions.

Liquidity Ranking

Ranking	Definition	Weighting
L1	Liquid	100%
L2	Traded	50%
L3	Illiquid	0%

Source: HSBC

The criteria used for liquidity ranking, in descending order of importance, are as follow:

- a) Quoted bid/ask spreads, adjusted for duration, observed from market sources. There are two types of market sources, major brokers and market makers.
- b) Size associated with quoted bids or asks.
- c) Frequency of market quotes observed. This is the number of times the quotes are observed per month, regardless of which side of the quote it is, i.e. a quote for both bid/ask counts as two.
- d) Observed trade volume.
- e) Frequency of inquiry.

To ensure the stability of the ADBI, an actual change in a constituent's liquidity ranking occurs one full month after the announcement of a ranking change, i.e. there is a transitory month in which investors can make adjustments for the pending changes in their portfolio weightings.

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