

## **Index Methodology**



## **AlphaShares China Yuan Bond Index**

**September, 2011**

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### Overview

The **AlphaShares China Yuan Bond Index** (“the Index”) measures and monitors the performance of an investable universe of publicly-available Chinese fixed income securities denominated in Chinese Yuan as defined by the criteria below. The Index is denominated in U.S. dollars. The Index is created and is owned by AlphaShares, LLC. The index is maintained and calculated by an independent, third-party Index Administrator.

### Index Construction

The AlphaShares China Yuan Bond Index is comprised of the public fixed income securities of issuers that meet the specific and objective criteria listed below:

#### 1. AlphaShares China Yuan Bond Index Eligibility Criteria

To be considered for inclusion in the Index, the following criteria must be met:

- A. **Currency.** Only bonds denominated in Yuan (Renminbi or RMB) are eligible for inclusion in the index.
  - a. The Index is denominated in U.S. dollars.
- B. **Issued.** Only seasoned bonds available to U.S. investors are eligible for inclusion in the index. Eligible issuers and their issues include:
  - a. Mainland-Chinese and non-Chinese governments.
  - b. Mainland-Chinese and non-Chinese government agencies.
  - c. International agencies and supra-nationals.
  - d. Major Mainland-Chinese Banks including Bank of China, Agricultural Bank of China, Bank of Communications, China Construction Bank, and Industrial and Commercial Bank of China.
  - e. Non-Chinese Banks and Corporations. Mainland-Chinese corporates are not eligible for inclusion in the index.
- C. **Amount Outstanding.** Bonds issued by Mainland Chinese entities including governments, government/agencies and banks must have a minimum of RMB 1 Billion outstanding par value are eligible for inclusion in the index. There is no minimum outstanding par value for bonds issued by non-Mainland Chinese entities.
- D. **Term to Maturity.** Bonds must have a minimum of one year maturity for inclusion in the index. Bonds that fall below one year maturity will be deleted from the index.

- E. **Duration.** The index will maintain a duration (option adjusted modified duration) less than 3.5.
- F. **Coupon Rate.** Only bonds that pay a fixed periodic coupon, that delay coupon payments until maturity, zero coupon bonds or floating rate bonds are eligible for inclusion in the index.
- G. **Quality.** Issues or issuers with a investment grade rating by Moody's, S&P and/or Fitch Rating of Baa3/BBB-/BBB-, respectively, or better are eligible for inclusion in the index.
- H. **Maturity Type.** Convertible and putable bonds are excluded from the index. Bullet and callable bonds are eligible for inclusion in the index.
- I. **Daily Pricing.** Only issues which carry either an ISIN or Sedol and can be priced on a daily basis are eligible for inclusion in the index.

## 2. Target Weights and Number of Issues

Index constituents are weighted as described below.

### A. China Government Bond Weights and Number of Issues

- a. **Security Weight - China Government Bond Sector Target and Maximum.** The target weight of the China Government Bond Sector is 22.5%. Government bonds in total (either Chinese or other) are limited to a maximum of 32.5% of the index. The maximum target weight of any one China government bond position is targeted at 4.5% of the index. If the index holds less than the maximum number of targeted issues of China government bonds, the weights of the issues will be divided equally to come to 22.5%.
- b. **Maximum Number of Issues** - The index will target the five largest China government bonds by amount outstanding par value for inclusion in the index. If two or more bonds have the same amount outstanding par value, the bonds will be ranked by duration from shortest to longest with longer duration preferred over shorter unless inclusion of the bond would cause the index to exceed its duration maximum of 3.5 in which case the next shortest duration bond would be selected such that the index duration would be less than the maximum.

### B. China Government Agency Weights and Number of Issues

- a. Security Weight - China Government Agency Sector Target and Maximum.** The target weight of the China Government Agency Sector is 22.5%. Government Agency bonds in total (either Chinese or other) are limited to a maximum of 32.5% of the index. The maximum target weight of any one China government agency position is targeted at 4.5% of the index. If the index holds less than the maximum number of targeted issues of China government agency bonds, the weights of the issues will be divided equally to come to 22.5%.
- b. Maximum Number of Issues -** The index will target the five largest China government agency bonds by amount outstanding par value for inclusion in the index. If two or more bonds have the same amount outstanding par value, the bonds will be ranked by duration from shortest to longest with longer duration preferred over shorter unless inclusion of the bond would cause the index to exceed its duration maximum of 3.5 in which case the next shortest duration bond would be selected such that the index duration would be less than the maximum.

### **C. China Bank Weights and Number of Issues**

- a. Security Weight - China Banks Sector Target and Maximum.** The target weight of the China Banks Sector is 22.5% Bank bonds in total (either China or other) are limited to a maximum of 32.5% of the index. The target weight of any one China bank bond issue/issuer is targeted at 4.5% of the index. Multiple issues by a single issuer will be pro-rated as necessary, e.g., if two BOC issues qualify for inclusion in the index, they will be weighted at 2.25% each for a total of 4.5%. If the index holds less than the maximum number of targeted issues, the weights of the issues will be divided equally to come to 22.5%.
- b. China Bank Bond Issuers and Issues -** The index will target the issues of the largest Mainland Chinese banks for inclusion in the index as per the eligibility rules. Issues will be ranked by par amount outstanding from largest to smallest. If two or more bonds have the same amount outstanding par value, the bonds will be ranked by duration from shortest to longest with longer duration preferred over shorter unless inclusion of the bond would cause the index to exceed its duration maximum of 3.5 in which case the next shortest duration bond would be selected such that the index duration would be less than the maximum.

### **D. Other Weights and Number of Issues**

- a. **Security Weights** - Issues not fitting into any of the sectors above but otherwise meeting all the index eligibility criteria, i.e., non-Chinese government, government/agency, banks and corporate issues, will make up the remainder of the index. The total target weight of these issues will be 32.5% (100% minus 22.5% China governments, plus 22.5% China government/agency plus 22.5% China banks). Issues will be weighted by their pro-rata share of their par amount outstanding capped at 4.5% at the issue or issuer level in the case of multiple issues.

## **Index Maintenance**

### **1. Additions**

Qualified new issues listed during the month meeting all of the eligibility criteria listed previously, and following the target weights and number of issues rules above, are added to the index on the first business day of the month following 60 days after their original issue date.

Additions may also be made to replace a smaller amount outstanding par value bond with a larger amount outstanding par value bond as per the target weight and number of issues rules above.

### **2. Deletions**

Bonds that fall below one year maturity will be deleted after the close of the last business day of that month at which they fall below one year maturity. For example, a bond falling below one year maturity on August 15<sup>th</sup>, will be deleted after the close of the last business day of August.

A bond may also be deleted if it is replaced by a larger amount outstanding par value bond as per the target weight and number of issues rules above.

Following a deletion, the next qualifying bond by amount outstanding in their sectors, if necessary, will be added to the index.

### **3. Index Reconstitution and Rebalancing**

The index is rebalanced on a monthly basis to reflect any new additions, deletions or changes in weightings due to redemptions, buy backs or other activities since the last rebalance.

Index holdings are reweighted, if necessary, as per Section 2 above, effective after the close of the last business day of the month.

## **Index Administration**

Index Administration will be performed by an independent, third-party Index Administrator. These responsibilities include monitoring and implementing adjustments, additions and deletions to the indices due to eligibility rules described above.

### **1. Index Calculation**

Index Calculation will be performed by an independent, third-party Calculation Agent. The Calculation Agent is responsible for compiling, calculating, maintaining, and disseminating the value of the indices.

### **2. AlphaShares Index Committee**

The AlphaShares Index Committee solely maintains the AlphaShares China Yuan Bond Index Methodology and is not involved in any way in the day to day maintenance or administration of the index.

The Index Committee will meet once monthly to review and approve additions and deletions to the index. Final determination of the inclusion or deletion of any bond issue will be made at the discretion of the Index Committee. Final changes to the next month's index constituent list will be made publicly available at the close of business 5 days prior to the effective date for the upcoming month's index.

The Index Committee will meet at least once annually to review this methodology. Any changes to the methodology will be publicly disclosed at [www.alphashares.com](http://www.alphashares.com) prior to implementation. A minimum ten (10) trading days prior notice will be given prior to the implementation of any such change by the Index Administrator.