

Alpha Bond Index Guide

Index Methodology & Management Guide for the Scottfree Markets Alpha Bond Index

January 2016



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1.0 INTRODUCTION

The SF Markets Alpha Bond Index (AlphaX) has been developed to provide an independent and neutral reference for both local and foreign investors to assess the performance of Nigerian Sovereign bonds. The index is designed to serve as an underlying for various investment products such as Index Funds and Exchange Traded Funds (ETF). As of 04 January 2016, the index tracked over NGN 5.790tn (\$29.13bn) of Nigerian Sovereign debt. The AlphaX is a market value weighted total return index and denominated in Naira and US Dollars.

2.0 INDEX GUIDE OUTLINE & REVIEW PROCESS

This index guide will serve to provide transparency into the determination process of the Alpha Bond Index including its methodology and maintenance. Due to the constant review process undertaken by SF Markets on its indices, and to adapt to external factors such as market changes and possible input from relevant market participants, SF Market index guides could be updated and changed. Material changes such as an index termination or an index redesign will typically be announced with advance notification so that clients have enough time to react and avoid any unforeseen impacts on a financial product i.e. at least 3 months. Please note that under extenuating circumstances, SF Markets reserves the right to make immediate changes to the index methodology e.g. an index liquidity rule change due to extremely low liquidity levels in the market. SF Markets will endeavor to initiate an immediate market consultation if such a situation occurs. All material changes will also be discussed with the Index Strategy Group and a notification sent out to clients as well as announced on the SF Markets website. A record of all material changes will be maintained and reflected under the Index Guide section on www.scottfreemarkets.com.

3.0 INDEX OVERVIEW

The Alpha Bond Index will be calculated in Naira (NGN) and US Dollars (USD) for the Total Return and Price (Clean) index versions. Total Return and Price versions will be calculated using continuous evaluated pricing and disseminated intra-day (hourly) with an end of day value published at the close of business. The total return index is adjusted for coupon payments.

The indices are calculated 5 days a week, from Monday to Friday between 09:00 and 16:30 West African Time (WAT) with the exception of exchange public holidays: New Year's Day; Mouloud Day; Good Friday; Easter Monday; Workers Day; Democracy Day; Eid al-Fitr; Independence Day; Eid al-Adha; Christmas Day and Boxing Day. The above list is not exhaustive and will be updated based on publicly announced exchange holidays.

The data used to construct the Alpha Bond Index i.e. prices, amount outstanding, accrued interest, coupons, foreign exchange rates etc. are sourced from freely available public information and credible data providers.

3.1 Name and Identifiers

The SF Markets Alpha Bond Index is published in Reuters under the code ".ALPHAX", Bloomberg under the code "ALPHAX" and ISIN DE000SLA1QJ8. In addition:

The SF Markets Alpha Bond Index USD is published in Reuters under the code ".ALPHAXUS" and ISIN DE000SLA1QK6.

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- The SF Markets Alpha Bond Clean Price Index is published in Reuters under the code ".ALPHACPX" and ISIN DE000SLA1QL4.
- The SF Markets Alpha Bond Clean Price Index USD is published in Reuters under the code ".ALPHACPXU" and ISIN DE000SLA1QM2.

4.0 INDEX CALCULATION

The Alpha Bond Index adopts a market value weighted indexing system and is calculated by multiplying the dirty price (price plus accrued interest) of the bond by the total amount outstanding.

For details of the formulas used in the calculation of the Alpha Bond Price and Total Return Indices, please refer to section 12.1 of the appendix.

4.1 Base Value and Date

The index has a base value of 100 and base date as of 02 November 2015.

4.2 Historical Data

Index historical and performance data for the AlphaX prior to 02 November, 2015 is back-tested and maintained from 04 January, 2010 (data that shows how the index could have performed over a certain period had it existed). Please note that the back-test data is hypothetical and does not serve as a guarantee of actual or future performance.

5.0 INDEX CONSTRUCTION & ATTRIBUTES

5.1 Eligible Universe

5.1.1 Bond Type

The universe will consist of Nigerian Sovereign (Federal Government) bonds that are publicly quoted in the Nigerian debt market subject to conforming to SF Markets eligibility rules detailed under section 5.0 of this guide.

Fixed and zero coupon bonds are eligible for inclusion in the index.

5.1.2 Exclusions

The following bond types will be excluded from selection into the index:

- Floating rate bonds
- Sinking fund bonds
- Convertible bonds
- Sukuk (Islamic bonds)
- Private placements
- Inflation-linked bonds
- > Collateralized bonds
- Collateralized debt obligations (CDOs)

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- Covered bonds
- Global depository notes
- Perpetual bonds
- Defaulted bonds
- > Trading flat bonds

5.1.3 Issue Type

Only debt issued by the Central Bank of Nigeria (CBN) on the authority of the Debt Management Office (DMO) will be considered for inclusion into the index.

5.1.4 Time to Maturity

Only bonds (new or continuing) with at least one-year remaining time to maturity will be eligible.

5.2 Listing

The objective of the index series is to represent the local Nigerian debt market and therefore bonds must have their listing in Nigeria.

5.3 Sector Classification

Sovereign issues only.

5.4 Pricing

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The bid price (evaluated) will be used for index calculation. New bonds will be included in the index with the ask price.

The bond prices used to calculate the Alpha Bond Index are sourced from Interactive Data Corporation (IDC) by SF Markets' Index Calculation Agent (ICA), Solactive AG.

5.5 Foreign Exchange Rates & Currency

Total Return and Clean Price indices will be calculated and published in Naira (NGN) as well as in USD using the Thomson Reuters foreign exchange spot rate available at 15:30 GMT/16:30 WAT.

5.6 Amount Outstanding & Liquidity

To ensure that liquidity remains an important factor for index qualification, the index will only consist of Nigerian Sovereign bonds with a minimum principal amount outstanding of NGN150bn (USD\$750mn). SF Markets constantly monitors the amount outstanding for each bond and can adapt its liquidity screening to reflect any significant changes in the market.

5.6.1 Amount Outstanding Review & Adjustment

Bonds amount outstanding research is collected and maintained by SF Markets on an ongoing basis. The bonds amount outstanding for the whole universe is also reviewed on a monthly basis based on publicly available data. All changes are announced 3 business days prior to the last business day of the



month, implemented after the close of business on the last business day of the month and effective the next trading day i.e. the open of the first business day of the next month.

The amount outstanding of a bond can also be reviewed and adjusted intra-month if it is being fully redeemed (fully called or completely repurchased). If such a situation occurs, the removal of the bond from the index will be applied immediately and effective T+0.

5.7 Capping

There will be no capping for the Alpha Bond Index.

5.8 Weighting

Index components will be weighted according to their correspondent market values in proportion to the aggregated market value of all components in the index.

5.9 Settlement

The Alpha Bond Index is calculated with a T+2 settlement day for the purpose of calculating accrued interest and market value.

INDEX MAINTENANCE 6.

6.1 Review & Rebalancing

In order to ensure that bonds maintain the criteria for inclusion and also to align with market movements, SF Markets will conduct index reviews on a periodic basis. For the Alpha Bond Index, reviews and rebalancing will be conducted monthly on the last business day of the month and effective on the first business day of the following month.

Key Review Days:

- Cut-off Date four business days prior to the adjustment day.
- Review date/Selection day three business days prior to the adjustment day.
- > Announcement Date two business days prior to the adjustment day.
- Adjustment date last business day of the month.
 Effective Date the first business day of the month following the review month.

Please note that if the first business day of the month after the review month is declared as a holiday, then the next available business day will be used as the review effective date.

6.2 Review & Rebalancing Process

Universe:

All Nigerian Federal Government bonds issued by the CBN on the authority of the DMO and have a listing in Nigeria. Bonds must fulfill the following criteria to be eligible:

- ≻ Liquidity Criteria: minimum amount outstanding of NG₦150bn (USD\$750mn).
- Coupon Type: fixed and zero coupon bonds only.

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> Time to Maturity: minimum term to maturity of one year.

Composition list:

- > A bond will be added to the index if it meets the above criteria.
- > A bond will be removed from the index if it does not meet the above criteria.
- > Changes to issue amounts are taken into account and adjusted.

Weighting & Capping:

- > The components are weighted with a bond's market value i.e. by volume.
- \blacktriangleright The components are not capped.

For what a typical review period will look like, please see the below indicative diagram:



6.3 Corporate Actions & Events/Index Adjustments

Index components are adjusted for corporate actions. For a general description on all corporate actions and events administered by SF Markets, please see below.

6.3.1 Full Tender/Early Redemption/Full Call.

A bonds issue amount will be adjusted intra-month i.e. immediately if it is being fully redeemed (fully called or completely repurchased). If such a situation occurs, the removal of the bond from the index will be applied immediately and effective i.e. T+0 with the bond proceeds being reinvested into the index after COB on the effective date. Please note that a tender must be mandatory, or if optional at least 90% of the bond must be tendered.

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6.3.2 Exchange Offers

- Optional exchange offers: If the exchange is successful for at least 90% of the amount outstanding, the bond will be exchanged into the relevant bond.
- Mandatory exchange offers: if less than 90% of the bond amount issued is exchanged, it will not be considered for treatment in the index. For cases where 90% or more of the amount outstanding is exchanged, it will be considered for treatment in the index by exchanging the relevant bonds i.e. the new bond will receive the weight of the old exchanged bond.

6.3.3 Flat Trading

This is where a bond is sold or traded without accrued interest i.e. the bond is in technical default or there is no interest due to the terms associated with the bond sale. If this situation occurs between two index adjustment days, the respective accrued interests and coupons will be set to zero. The bond will remain a component of the index until the next adjustment date.

6.3.4 Default Bonds

If an index component is in default, the bond will be removed from the index immediately and effective T+0 with its last available price.

6.3.5 Payment-in-Kind Bonds

These are when bonds pay interest in surplus or additional bonds instead of in cash. For all total return calculations, Payments-in kind will be treated like usual coupons with the assumption that the surplus or additional bonds are sold immediately and the proceeds reinvested in the index i.e. in other index components.

6.3.6 Ex-dividend Bonds

This is when the next coupon of a bond is separated from the bond in advance of the coupon payment date. Between the ex-date and the pay-date, the bond buyer does not have the right to receive the next coupon which means that the accrued interest is negative during that time period. If a bond is currently a component of the index, the next coupon payment will be held separately via the Variable Coupon Adjustment Factor (CPAdj_{it}). However if the bond becomes a component of the index during the exdividend period, the Variable Coupon Adjustment Factor (CPAdj_{it}) is set to zero as the next coupon payment will not accrue to the index.

6.3.7 Bond Issuances

New bonds are only considered for index inclusion during the monthly rebalancing process at month end. The amount outstanding for a bond will only be adjusted (except fully redeemed bonds) during the monthly rebalancing process at month end.

6.3.8 Coupon Payments

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Coupon payments are reinvested in the index upon receipt i.e. after close of business (COB) on the coupon payment date.



6.3.9 Withholding Tax

There is no withholding tax application on the Alpha Bond Index due to a tax waiver for all categories of bonds by the Nigerian Federal Government.

7.0 INDEX DISSEMINATION & DISTRIBUTION

7.1 INDEX STATUS

The Alpha Bond Index is calculated intra-day (hourly) and could exhibit the following characteristics

Streaming: The index is being calculated and there are no issues.

Unchanged: The index is static due to the underlying securities exhibiting no price movement or is static due to possible technical issues.

Closed: The index is no longer calculating for the day and the final index value has been disseminated.

7.2 INDEX DATA

The Alpha Bond Index data and index levels are primarily available on SF Markets website – <u>www.scottfreemarkets.com</u>. This data is also available on <u>www.solactive.com</u> and through various data vendors.

Alpha Bond Index data files are delivered to clients daily and periodically via FTP and email. Please visit the data delivery section on <u>www.scottfreemarkets.com</u>. For a list and description of data files, see section 12.2 in the appendix.

7.3 INDEX NOTIFICATIONS

Index announcements and press releases are available on SF Markets website – <u>www.scottfreemarkets.com</u>.

8.0 INDEX CALCULATION AGENT (ICA)

SF Markets has selected Solactive AG as its Index Calculation Agent. Since its creation in 2007, Solactive has become one of the key players in the indexing space. The German multi-asset class provider is focusing on tailor-made indices; developing, calculating and distributing them worldwide. For further information on Solactive AG, please visit <u>www.solactive.com</u>.

9.0 INDEX CORRECTION POLICY

9.1 ERROR CORRECTION POLICY FOR SF MARKETS INDICES

Types of errors & their treatment in SF Markets Indices

1. Incorrect EOD evaluated price of a bond:

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- Incorrect EOD evaluated prices due to an In-House error and identified on time i.e. T+1 are corrected and republished.
- Incorrect EOD evaluated prices due to a vendor or exchange error are only corrected and republished if SF Markets receives the new information within a reasonable time period i.e. T+1.
- Last available prices are used for index calculation.
- SF Markets reserves the right not to make a correction if post an impact analysis, the index error does not exceed 5 basis points.

2. Missed corporate event:

- Errors are typically corrected & republished, provided the error is identified within one trading day of the effective date i.e. T+1.
- ➢ If a decision is made to fix the error retroactively, all affected indices are recalculated, all files republished and clients are informed.
- However if the error is identified post T+1, then depending on the severity of the error (i.e. greater than 5 basis points) and the affected index (headline index i.e. the Alpha Bond Index or an index used for benchmarking and performance related activities i.e. ETFs and Structured Products), errors could still be corrected and republished.

3. Late announcement:

- All late announcements identified with an effective date T+1 are applied immediately and a communication sent out to clients.
- All late announcements identified with an effective date T+2 or greater are applied at the earliest possibility and will be reflected in the Corporate Action file. A communication will not be sent out to clients unless it's a SF Markets notice that usually follows certain types of events i.e. an exchange offer or fully redeemed bond.
- For all late announcements identified with an effective date of T or T-1 and depending on the affected index (headline index i.e. the Alpha Bond Index or an index used for benchmarking and performance related activities i.e. ETFs and Structured Products), the event could be applied (subject to an index error exceeding 5 basis points) for the next available trading day or applied on the effective date with all affected indices and files corrected and republished. Both scenarios will be communicated to clients.

9.2 PRICE UNAVAILABILITY

9.2.1 Whole Day

If prices are unavailable due to unforeseen circumstances such as outages, natural disasters or any other unexpected event, SF Markets will not disseminate/publish the index for that day. If this situation occurs, a communication will be sent out to clients.

9.2.2 Half/Partial Day

In circumstances where there is half-day trading or the price source is forced to close during regular trading hours due to unforeseen circumstances such as outages, natural disasters or any other unexpected event, SF Markets will use either the last regular bid price reported for each bond or if the last regular

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bid price is not reported, the previous working day's closing prices. If this situation occurs, a communication will be sent out to clients.

9.2.3 Corporate Action Treatment when Prices are Unavailable

In situations where a corporate action (full tender, exchange offers etc.) is effective on a date when prices are not available, then all corporate actions will be moved to the next trading date. This involves a communication sent out to the end users of the indices and the republishing of all affected files. Please note that if the relevant authority i.e. the DMO or exchange moves the effective date of a corporate action, SF Markets will follow their lead.

9.2.4 Review/Rebalancing Treatment when Prices are Unavailable

In situations when prices are not available the day before the Index review/rebalance effective date, and post a market consultation, the review changes for the local market could be postponed to the next trading date post the first day when prices become available so closing prices of that first day of trading can be used for adjustments.

In situations when prices are not available on the review/rebalance effective date, the review changes for the local market will be postponed to the next available trading day.

If this situation occurs, a communication will be sent out to clients.

9.3 UNEXPECTED DISSEMINATION ISSUE

9.3.1 Disruption to the Price Feed Due to a Data Vendor Issue

In situations where there is a complete disruption to the price feed due to an issue from SF Markets primary price source feed (IDC via ICA), a communication will be immediately sent out to clients with an indication of when the issue will be resolved if known. The communication will be sent out via email with a subsequent communication also sent once the issue has been resolved.

9.4 FOREIGN EXCHANGE RATE ISSUE

If a situation occurs whereby there are no fixed foreign exchange rates available at 15:30 GMT/16:30 WAT, then SF Markets will either use a previous working day's fixed foreign exchange rate or the last hourly spot rate available to calculate end of day index values. This will not affect indices calculated in NGN.

9.5 NOTIFICATION POLICY FOR MATERIAL CHANGES

Typically, all notifications are posted on the SF Markets website and sent to SF Markets clients.

For changes announced and implemented immediately, see the below list:

> Index level corrections i.e. additions, deletions, other corporate actions etc.

For changes announced and implemented at the earliest possibility, see the below list:

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- Changes to how an index is constructed and maintained i.e. calculation formula, eligibility, liquidity screening, corporate action treatments etc.
- > Correction to historical index values i.e. the official close.

For changes announced and implemented with a notification period of 90 days, see the below list:

Material change to the format and structure of daily and periodical data files i.e. index close, index open, Corporate Actions.

10.0 INDEX GOVERNANCE & POLICY

10.1 Index Working Committee

The Index Working Committee (Internal) is composed of full-time professionals from SF Markets and its Index Calculation Agent, Solactive. The committee will particularly focus on the determination of rebalancing changes to the index especially the identification of eligible constituents in circumstances where the eligibility or the classification of a bond is open to question or unclear. In addition, the committee will discuss changes to the rules of existing/new indices as well as review any market developments that could lead to an index rule change. The committee could use publicly available information along with any information that is obtained by it or submitted to it that the committee deems accurate and reliable.

10.2 SF Markets Advisory Board (Fixed Income)

The SF Markets Advisory Board (External) is comprised of representatives from a broad range of market practitioners, consultants, market makers and industry bodies. The purpose of the group is to provide guidance and strategic advice on matters relating to the index rules governing the construction and maintenance of the index.

10.3 Committee Decision Appeals

Index users can appeal against the decisions of the Working Committee/ Advisory Board if they believe either have not acted within the rules established for the management of the Alpha Bond Index or either of the bodies have not taken into account significant facts that could have potentially affected a decision.

Appeals must be communicated in writing to the Index Working Committee or SF Markets Advisory Board within a reasonable period. Please address the letter to the Index Working Committee or SF Markets Advisory Board and send to the below address:

The Brew, Eagle House. 163 City Road, London. UK. EC1V 1NR



10.4 Index Complaints Procedure

All complaints with regards to SF Markets specific indices i.e. methodology, index reviews, corporate action treatment or any aspects of the index determination process etc. can be forwarded to <u>policy@scottfreemarkets.com</u>. Depending on the nature of the complaint and its severity, SF Markets will endeavor to address the complaint in a timely and efficient manner.

10.5 Index Decommission Policy

Indices with Financial Products (to SF Markets knowledge): If a situation occurs where SF Markets has to decommission or terminate an index or index family i.e. methodology is no longer relevant or adaptable due to a changing market environment, SF Markets will carry out the following steps:

- ▶ Initiate a Market Consultation Process (MCP).
- After careful deliberation by SF Markets IWC/Strategy Group and depending on the result of the MCP, SF Markets in a timely manner, will endeavor to provide an alternative index that is suitable for clients.
- Or in a timely manner announce the decommissioning of the index or index family. If this step occurs, SF Markets will also endeavor to carry on calculating the index as long as it is feasibly possible.

Indices without Financial Products (to SF Markets knowledge): If a situation occurs where SF Markets has to decommission or terminate an index or index family i.e. methodology is no longer relevant or adaptable due to a changing market environment, SF Markets will carry out the following step:

Initiate a press release in a timely manner i.e. 3 months in advance to announce the decommissioning of the index or index family.

11.0 CONTACTS

For all index related queries, please contact:

SF Markets

The Brew, Eagle House, 163 City Road, London EC1V 1NR, United Kingdom

Tel: +44 (0)203 773 8626 Fax: +44 (0)203 637 2785 Email: <u>enquiries@scottfreemarkets.com</u>



12.0 APPENDICES

12.1 Appendix: Index Calculation Formulas

The Alpha Bond Index is calculated using the following formulas:

Price Return Index Formula:

 $Pricereturn_{t,i} = \frac{Price_{t,i}}{Price_{t-1,i}} * \frac{FX_{t,i}}{FX_{t,i-1}} - 1$

weighting $_{t,i} = \frac{Price_{t,i} * Amount_{SD,i} * Cap_{SD,i} * FX_{t,i}}{\sum_{i=1}^{a} Price_{t,i} * Amount_{SD,i} * Cap_{SD,i} * FX_{t,i}}$

$$Index_{t} = Index_{t-1} * (1 + \sum_{i=1}^{a} (Pricereturn_{t,i} * weighting_{t-1,i}))$$

Total Return Index Formula:

$$Totalreturn_{t,i} = \frac{Price_{t,i} + ACCInt_{t,i} + PaidCash_{t,i}}{Price_{t-1,i} + ACCInt_{t-1,i}} * \frac{FX_{t,i}}{FX_{t,i-1}} - 1$$

$$weighting_{t,i} = \frac{(Price_{t,i} + ACCInt_{t,i}) * Amount_{SD,i} * Cap_{SD,i} * FX_{t,i}}{\sum_{i=1}^{a} (Price_{t,i} + ACCInt_{t,i}) * Amount_{SD,i} * Cap_{SD,i} * FX_{t,i}}$$

$$Index_{t} = Index_{t-1} * (1 + \sum_{i=1}^{a} (Total return_{t,i} * weighting_{t-1,i})$$

Where:-

Totalreturn _{t,i}	Total return of the bond i on trading day t
$Pricereturn_{t,i}$	Price return of the bond i on trading day t
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$\begin{array}{ll} Index_t & Value \mbox{ of the index on} \\ trading \mbox{ day } t \end{array}$

- $\begin{array}{ll} Index_{t\text{-}1} & Value \mbox{ of the index on} \\ & trading \mbox{ day } t\text{-}1 \end{array}$
- $\begin{array}{ll} Price_{t,i} & Price \mbox{ of the bond } i \mbox{ on } \\ trading \mbox{ day } t \end{array}$
- $\begin{array}{ll} Price_{t-1,i} & Price \ of \ the \ bond \ i \ on \\ trading \ day \ t-1 \end{array}$
 - $FX_{t,i} \quad \mbox{Foreign Exchange rate for} \\ \mbox{bond i on trading day t} \label{eq:FXt}$
 - $\begin{array}{ll} FX_{t\text{-}1,i} & Foreign \ Exchange \ rate \ for \\ & bond \ i \ on \ trading \ day \ t\text{-}1 \end{array}$

- Weighting_{t,i} Weighting of the bond i on trading day t
- PaidCash_{t,i} a) Value of the coupon payment for bond i on trading day t
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- b) If a bond i will be removed from the index, the resulting payment of the bond will be included in the paid cash component
- Cap_{SD,i} Parameter used to scale the weighting of bond i to fulfil weighting requirements described in section 5.8 defined on selection day (SD)

12.2 Appendix: Accuracy

The value of the index are rounded to two decimal places.

The index calculator for the Alpha Bond Index will follow the convention below:

Act/Act

Accrued interests are calculated with settlement convention T+2.

12.3 Appendix: Index Data Files

So index users are able to track index changes, SF Markets deliver a set of daily and periodical files to clients:

Data Files	Description
	Displays component data (identification codes, prices, amount outstanding, coupons,
Index Close File	accrued interest, weightings etc.) for an index at the close of a trading day.
	Displays component data (identification codes, prices, amount outstanding, coupons,
	accrued interest, weightings etc.) for an index at the start of the next trading day
Index Open File	adjusted for any corporate actions/events.
	Displays component corporate actions i.e. exchange offers, full calls, coupon payments
Corporate Action File	etc. for an index.
	Data files displaying all changes to the Alpha Bond index at each monthly review.
Review Data Files	Includes additions, deletions, amount outstanding changes etc.
	Back-test data displaying historic performance of the index series over a certain time
Index History File	period.
	Daily factsheet that will display key information on the Alpha Bond Index i.e. index
Daily Factsheet	features, statistics, fundamental & analytics etc.

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12.4 Appendix: Index Terminology

Accrued Interest: This is the interest that has piled up on a bond since the last coupon payment (does not include the settlement date) = (accrued days / days in current coupon period) X coupon /2.

Basis Points: Used as a measure for index value changes i.e. one basis point represents 1/100 of 1% i.e. 0.0001

Capping: When a security in an index has a limit on its weight. The market value is used to determine its relative weighting in the index.

Components: The individual securities that make up an index.

Corporate Actions: Typically standard actions that affect a security for e.g. full tender, exchange offer etc.

End of Day: information/data is available after market close.

Exchange Traded Products: Securities traded on an exchange that reflect or track the performance of a particular index, commodity or debt instrument.

Fast Entry/Exit: Assessment of securities for potential entry into or exit from an index in periods where the index is not being reviewed.

File Transfer Protocol (FTP): Web-based system allowing the transfer and download of files.

Inflation-linked Bonds: These are bonds where its principal is indexed to inflation.

Index: Amalgamation of securities that represents a particular market or segment of it.

Intra Day: information/data is available at snapshot intervals i.e. every one hour.

Liquidity: Value and frequency of trading for a security listed on exchange.

Market Value: Price of a bond multiplied by its amount outstanding. Represents the total market value of a bond. Sum of all the bonds market values will represent the index's total market value.

Paid Cash: Value of a bonds coupon payments between adjustment days. It could also be the resulting payment of a bond when it is deleted from the index between adjustment days. Paid cash will be reinvested directly into the index on the effective date.

Price Index: Also known as "Capital Index", reflects the capital gains of its components based on price movements and weighting.

Selection Day: Also known as the "Review Date", is a day that occurs 3 business days prior to the adjustment date.

Sinking Fund Bonds: is a method whereby an organization or corporation sets aside money over time for the purpose of buying back some of its bonds in the open market.

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T+0: Tomorrow. Used to indicate when an action will be effective to a security or index. For example, if Today is Monday, then T+0 represents the start of trading on Tuesday.

T+1: Today plus one clear trading day. Used to indicate when an action will be effective to a security or index. For example, if Today is Monday, then T+1 represents the start of trading on Wednesday.

T+2: Today plus two clear trading days. Used to indicate when an action will be effective to a security or index. For example, if Today is Monday, then T+2 represents the start of trading on Thursday.

Total Return Index: Like a price index, it reflects the capital gains of its components based on price movements, weighting and the reinvestment of coupon payments.

Universe: Overall set of bonds that is used as a basis for the application of index screening e.g. liquidity, fixed coupon, zero coupon etc.

Withholding Tax: A tax that is levied on the coupon payments of bonds.

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