



markit

**Markit Index RCD
XML User Guide**

Version 1.0

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Introduction

Markit is an integrated data, valuations and connectivity provider, with specialized expertise in the OTC derivatives sector. The Reference Cashflow Database service allows customers to obtain independent monthly settlement data for credit default swaps written against asset backed securities.

The company has a well established presence as a data service in credit trading and takes contributions from all the major players in these markets. The credit data service is built on a simple and reliable data transmission protocol in which XML files are transmitted over the internet using http or https. The same approach to data transmission being used in newer products including Portfolio Valuations.

In the RCD Index service, a customer downloads Markit's XML files containing monthly settlements and supporting data for a one million dollar Index trade directly from the Markit.com website. Markit provides this service as part of our role as Calculation Agent for the ABX.HE and CMBX Indices.

This document describes how to retrieve Index XML files. For ABX.HE, the Index file are published by 6 PM, one business day following the bond payment date which is usually the 25th of the month. For CMBX, the Index file will be available by 6 PM on the 19th of the month or the next business day.

Please note that Markit has the right to modify the format of the XML feeds outlined in this document. Before phasing out the old structure, Markit provides notification of any changes and runs the old and new structures in parallel.

If you encounter problems or at any time need additional support, please contact us using the details in the Contact Markit section.

Outline of the Steps Involved in Obtaining Settlements

Downloading Settlements from the Markit Website

Once the RCD calculations have been completed by Markit for the month, the results are available for the customer to download from the Markit public website. For ABX.HE, the Index file are published by 6 PM, one business day following the bond payment date which is usually the 25th of the month. For CMBX, the Index file will be available by 6 PM on the 19th of the month or the next business day.

The most recent file is always posted to the exact same address to allow users to automate a process to download them.

For ABX.HE, the address is:

http://www.markit.com/news/RCD_ABX_HE_INDEX.xml

For CMBX, the address is:

http://www.markit.com/news/RCD_CMBX_Index.xml

In addition, the XSD file for each Index file is located at the following address

For ABX.HE, the address is:

<http://www.markit.com/news/ABXIndexSettlements.xsd>

For CMBX, the address is:

<http://www.markit.com/news/ABSIndexSettlements.xsd>

Using Curl to download XML

Curl is a simple software package that is available as source code or as a binary from the following websites:

<http://curl.sourceforge.net/download.html>

<http://curl.haxx.se/download.html>

The first step is to download the curl program and the OpenSSL packages (that enable curl to transmit information securely with SSL) appropriate for your computer from one of these websites.

Download Index settlements calculations using curl

Curl is a simple software package that is available as source code or as a binary from the following websites:

<http://curl.sourceforge.net/download.html>

<http://curl.haxx.se/download.html>

The first step is to download the curl program and the OpenSSL packages (that enable curl to transmit information securely with SSL) appropriate for your computer from one of these websites.

The following Curl command to retrieve the results of the settlements calculations:

```
curl http://www.markit.com/news/RCD_ABX_HE_INDEX.xml > abx_he_index.xml
```

The exact content of the settlements calculations depends on the trade details, although the general layout is always the same.

Descriptions of Index Settlement file

Important Notes:

- This file is meant to be used in conjunction with the ISDA definitions set forth in the ABX.HE and CMBX Standard Terms.
- Total Fixed Payment Amount is determined by adding the Fixed Payment Amount, Corrected Fixed Payment Amount, Interest Shortfall Reimbursement Amount, Principal Reimbursement Amount, and Writedown Reimbursement Amount.
- Total Floating Payment Amount is determined by adding the Corrected Floating Payment Amount, Interest Shortfall Payment Amount, Principal Shortfall Amount, and Writedown Amount.
- Correction fields will only appear when there actually is a corrected value.

Following is a detailed description of the Index file:

<u>Tag</u>	<u>Format</u>	<u>Description</u>
data header		Information about the file type, file version, and date
name	Text	File Name, in this case RCD Indices
version	number	The most recent version for RCD Indices is 0.1
date	Date	Date the file was published. Files could conceivably be published every day as information is learned.
abcdds		Information on the reference entity/obligation of the synthetic contract described, there will be one ABCDS for each index reported on.
indexname	Text	The name of the index described.
annex	Date	The date of the index annex referenced
series	text	The series of the index
version	text	Where applicable, the version of the index. ABX does not have versions, CMBX does.
initialfactor	Number	Initial factor at the effective date of the index.
ccy	Text	The currency of the index trades, and subsequent amounts described
red	Text	The CLIP of the index that references the bond.
ontherun	Text	An indicator denoting whether this is the most recent series of the index
fixedrate	Number	The fixed spread of the index that references the bond.
effective	Date	Effective Date of the trade
firstpayment	Date	First Payment Date of the Trade
frequency	Text	Payment Frequency
maturity	Date	Final payment date of the trade
initialfaceamt	Number	Initial contract size, or the unit of reporting for this file.
referenceprice	Number	Reference price for the contract
interestshortfallcapbasis	Text	The interest shortfall cap option selected for the trade
correction		This describes payment values that are made due to a correction of a previously stated value.
paymentdate	Date	Swap payment date the corrections are being applied to.
factor	Number	The corrected factor value for the payment date.

interestshortfallpmtamt	Number	The corrected Interest Shortfall Payment Amount for the payment date, determined in relation to Interest Shortfall Cap option chosen
interestshortfallreimbursementpmtamt	Number	The corrected Interest Shortfall Reimbursement Payment Amount for the payment date, determined in relation to Interest Shortfall Cap option chosen
principalshortfallamt	Number	The corrected Principal Shortfall Amount for the payment date
principalshortfallreimbursementamt	Number	The corrected Principal Shortfall Reimbursement Amount for the payment date
writedownamt	Number	The corrected Writedown Amount for the payment date
writedownreimbursementamt	Number	The corrected Writedown Reimbursement Amount for the payment date
fixedamt	Number	The corrected fixed amount. Can be either positive or negative, positive being a fixed payer amount, and negative being a floating payer amount.
fixedpaymentamt	Number	The corrected fixed paynt amount, resulting from an incorrect factor from a prior period. Can be either positive or negative, positive being a fixed payer amount, and negative being a floating payer amount.
fixingreference	Text	Corrected rate type upon which the cumulative interest shortfall payment amount is based
fixingrate	Number	Corrected rate value upon which the cumulative interest shortfall payment amount is based
cumulativeinterestshortfallamt	Number	Corrected cumulative interest shortfall amount for this payment date; by definition, including interest shortfall and reimbursement amounts for this payment date.
cumulativeinterestshortfallpmtamt	Number	Corrected cumulative interest shortfall payment amount for this payment date; by definition, including interest shortfall and reimbursement payment amounts for this payment date.
cumulativeinterestshortfallcompoundingfactor	Number	The corrected value of cumulative interest shortfall compounding factor upon which balances for this period have accrued
currentsettlement		Payment information for the current payment date
accrualperiodbegins	Date	Begin date for calculating interest accrued.
accrualperiodends	Date	End date for calculating interest accrued.
swappaymentdate	Date	The next payment date for the swap
factor	Number	The factor upon which the fixed rate has been accruing
interestshortfallpmtamt	Number	The Interest Shortfall Payment Amount for the payment date, determined in relation to Interest Shortfall Cap option chosen
interestshortfallreimbursementpmtamt	Number	The Interest Shortfall Reimbursement Payment Amount for the payment date, determined in relation to Interest Shortfall Cap option chosen
principalshortfallamt	Number	The Principal Shortfall Amount for the payment date
principalshortfallreimbursementamt	Number	The Principal Shortfall Reimbursement Amount for the payment date
writedownamt	Number	The Writedown Amount for the payment date
writedownreimbursementamt	Number	The interest shortfall reimbursement amount for the current payment date

fixedcorrection	Number	Additional fixed payment amount for the current payment date due to a correction of a prior payment amount.
floatingcorrection	Number	Additional floating payment amount for the current payment date due to a correction of a prior payment amount.
fixedamt	Number	The fixed payment amount, resulting from the application of the fixed rate to the notional amount for the current period.
fixedpaymentamt	Number	Fixed amount plus all reimbursements and corrected amounts payable this period.
fixingreference	Text	Rate type upon which the cumulative interest shortfall payment amount is based
fixingrate	Number	Rate value upon which the cumulative interest shortfall payment amount is based
cumulativeinterestshortfallamt	Number	Cumulative interest shortfall amount for this payment date; by definition, including interest shortfall and reimbursement amounts for this payment date.
cumulativeinterestshortfallpmtamt	Number	Cumulative interest shortfall payment amount for this payment date; by definition, including interest shortfall and reimbursement payment amounts for this payment date.
cumulativeinterestshortfallcompoundingfactor	Number	The cumulative interest shortfall compounding factor upon which balances for this period have accrued
nextsettlement		Information for the next payment date
accrualperiodbegins	Date	Begin date for calculating interest accrued.
accrualperiodends	Date	End date for calculating interest accrued.
swappaymentdate	Date	The next payment date for the swap
fixedamt	Number	The fixed payment amount for the next payment date, resulting from the application of the fixed rate to the notional amount for the next period.
fixedcorrection	Number	Additional fixed payment amount for the next payment date due to a correction of a prior payment amount.
floatingcorrection	Number	Additional floating payment amount for the next payment date due to a correction of a prior payment amount.
factor	Number	Factor for the next payment date
fixingreference	Text	Rate type upon which the cumulative interest shortfall payment amount is based for the next payment period.
fixingrate	Number	Rate value upon which the cumulative interest shortfall payment amount is based for the next payment period.

Contact Markit

If you have additional questions not answered in this guide, please contact Markit RCD:

- by email at support@markit.com , or
- by phone in North America at +1-212-931-4900 or in Europe at +44-20-7260-2200.

For information about Markit's other services, please contact a Markit sales representative:

- by email at sales@markit.com, or
- by phone in:

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