MONTHLY & DAILY CRSP US TREASURY RELEASE NOTES

MARCH 2010 MONTHLY/QUARTERLY UPDATE

These release notes pertain to the March 2010 release of the CRSP US Treasury databases.

INTRODUCING TRZ!

CRSP is pleased to release the CRSP Daily & Monthly US Treasuries (TRZ) Database. The TRZ database is in CRSP's proprietary format, CRSPAccess, and is accessible through our Windows interface, CRSPSift. The TRZ database is immediately available to our current subscribers of the combined daily/monthly Treasuries product.

A new tool in CRSPSift, TRSQuery, allows for easy navigation to treasury data through organized data categories and groups as well as search functions for treasury issues and data items. Treasury issues can be identified through maturity and issue dates, CUSIPs, and CRSP identifiers, and our newest identifier keys, TREASNO for individual issues, and TREASNOX for issue series. Output can be viewed in report format on the screen, or written to SAS datasets, Excel, Matlab, and text files.

The new TRZ database contains all the data from the current treasury files that ship in SAS, Excel and ASCII formats, as well as some additional new items such as nominal price. The TRZ database does not replace the existing files, but is shipping in addition to them. The BAZyyyymm volume label found on the combined treasuries DVD is replaced with the volume label TRZyyyymm on the combined product DVDs. The Windows setup program will install datasets BMZ, BDZ, and TRZ.

For detailed instructions on accessing the TRZ database, please reference the Sift User Guide that is found on our website at http://www.crsp.chicagobooth.edu/documentation/pdfs/crspsift_guide_v31.pdf

If you are interested in upgrading your Treasuries subscription to the combined product, please contact subscriptions at 312-253-6400, Option 1, or subscriptions@crsp.ChicagoBooth.edu.

NEW IN TRZ

DATA ITEMS

NOMINAL PRICE AND NOMINAL PRICE FLAG

Daily and monthly nominal price and price flag items have been added to the database. Nominal price values are most often the Bid/Ask Average. Flag values are:

B	Bid
M	mean of Bid/Ask (over 99% of the time)
X	Unavailable/missing

ITEM NAME CHANGES

Many item names in the new TRZ database are modified from their names in the original flat files. Time series items in the TRZ database are preceded with the letters TD, for Treasury Daily, or TM, for Treasury Monthly. For example, DURATN in the original files have daily and monthly item names TDDURATN and TMDURATN the new TRZ database. This change allows users to extract both daily and monthly series in the same query.

Other descriptor items that have different daily and monthly item names in the original treasury files, now have a single item name when there is no distinguishing between daily and monthly values. For example, *Reason for End of Data*, WHY (daily) and IWHY(monthly) is given the single item name IWHY in the new TRZ database.

Some items have been completely renamed in order to be more easily identified. For example, Bid and Ask items, PRIC1R(I) and PRIC2R(I) in the monthly files , BID and ASK in the daily files, are TMBID, TMASK, TDBID, and TDASK in the new TRZ database.

For a complete cross reference of old and new item names, please see the Appendix at the end of these release notes and at the end of the new Treasuries User Guide.

CORRECTIONS

TREASURY CALENDAR CLEANUP

For two dates, the daily and monthly treasury calendars were inconsistent. Research was completed and the following corrections to the monthly calendars were made.

Old Date	New Corrected Date
19801030	19801031
19650429	19650430

One date was removed from the Treasuries TRZ database and original daily files.

Date	Reason
March 21, 2008	Good Friday – trading holiday

MISSING CRSPID ADDED

A 1993 Treasury Bill, CRSPID, 19930902.400000 (TREASNO 202530) was missing from the monthly files. It has been added to the monthly files.

SOURCE DATA

Review of data source codes was complete and some of the obvious corrections were made. 10 treasury issues in both the daily and monthly files had source codes of "x". These were found to be typos and were changed to upper case "X", representing GovPX.

ICAP data, identified with the code "I" began in February 2009. This code's incorrect start date of 8/3/2009 has been corrected by extending back to its proper start date of 2/2/2009.

NIPPY – NUMBER OF INTEREST PAYMENTS PER YEAR

Valid NIPPY codes are one of 3 values:

0	Treasury bill or certificate pays interest only at maturity
2	Semi-annual interest
4	Quarterly interest

Unused codes 1 and 3 have been removed from the documentation. No issues were improperly coded.

NOTICE – NOTICE REQUIRED ON CALLABLE ISSUES

NOTICE codes are one of the following values:

0	No requirement
3	3-month call notice
4	4-month call notice
6	6-month call notice

Codes 3 and 6 are obsolete. Code 4 is a recent legacy code. The last callable bonds were issued in 1984 and last traded in 2009.

MISSING VALUES

Inconsistent missing value for items in the original treasury files including iout1r and iout2r were formerly a combination of 0,-1, and null values. These have all been consistently coded to be -99 in ASCII files and null values in the SAS tables.

Missing values in the new TRZ database are consistently -99. For SAS output generated by CRSPSift, the missing values are also displaying as -99 rather than null values. in a subsequent release, these -99 values will be changed to display as null values.

KNOWN ISSUES

Moving the treasuries files into a database format required significant re-engineering. Subsequent phases of this database will include support in TsPrint, the addition of daily versions of the monthly supplemental files, and addition of TIPS.

IFCPDTF – FIRST COUPON PAYMENT DATE FLAG

The original monthly and daily ASCII and SAS versions all used slightly different coding schemes to indicate whether a first coupon payment date was estimated, missing, or verified. The IFCPDTF item in TRZ uses the standardized codes in the table below:

CODE DESCRIPTION	TRZ
First coupon date was estimated.	-1
No first coupon date (Treasury Bill or Not Applicable)	0
First coupon date has been verified	1

PRECISION DIFFERENCES

Several items in the new TRZ database have different degrees of precision when compared to their counterparts in the original Treasury files. In the original files, Bid and ask, Yield-to-Maturity, Accrued Interest, and Returns have 4 places to the right of the decimal. In the new TRZ files, these items have up to 9 places to the right of the decimal. In testing, no difference greater than .00005 were found.

DAILY TOTAL AND PUBLIC DEBT, DAILY AND MONTHLY PAID INTEREST

Four data items, Daily Total Debt (TDTOTOUT), Daily Public Debt (TDPUBOUT), Daily and Monthly Paid Interest (TD- and TMPDINT) have been removed from data groups and can be found only by using the Search function in Sift. All four items should be used with caution because they will populate the full requested date range with zeros for periods when the date range may not be valid for an issue. This results in unnecessarily large output files by forcing all accompanying data items in the request to also populate the full date range. In addition, the values for the first period (12/31/1925 for TMPDINT and 6/14/1961 for TDPDINT) should be ignored. Date restrictions will be applied to these items in a subsequent release.

GENERAL DATABASE INFORMATION

- Installation of all CRSP databases is done with InstallAnywhere. Individual files must first be installed onto the computer hard drive or network directory.
- SAS data sets are provided, which can be used with SAS directly with no conversion needed.
- The CRSP US Treasury Databases have been tested on Windows XP, Sun Solaris and Linux.
- Sample programs with syntax compatible with Windows and Unix are provided on the DVD.

The following platforms and with the listed compilers are currently supported:

	FORTRAN-95	C (DAILY ONLY)
Windows:	Intel FORTRAN Compiler 9.1	MS Visual Studio C++
Linux:	g95 v 3.5.0 (Free) Lahey/Fujitsu FORTRAN-95 v 6.20	gcc 3.2.3
Sun Solaris:	Sun FORTRAN-95 8.2 2005/10/13	Sun C 5.8 2005/10/13

For complete details and instructions, please refer to the CRSP Treasuries Guides on our website at www.crsp.chicagobooth.edu/documentation.

The CRSP US Treasury Database is available as a daily database, monthly database, or the two combined. Each is available on a DVD. The same DVD can be used on Windows XP, Sun Solaris, or Linux systems. The volume labels of the three datasets are:

- BDZ1_201003_SGD – CRSP US Daily Treasury Database
- BMZ1_201003_SGD – CRSP US Monthly Treasury Database
- TRZ1_201003_SGD – CRSP US Daily and Monthly Treasury Database
  NOTE: BAZ has been renamed to TRZ.

JANUARY 2010 DATA EDITS

Monthly data was added for CRSPID 19930902.400000 for 19930331-19930831.

The item, Reason for End of Data in File (WHY–daily, IWHY–monthly), was edited by changing values to 2 - “Called for Redemption,” from 0 and 1, for the following CRSPIDs:

- 20100215.511750
- 20111115.514000
- 20100515.510000
- 20110515.513870
- 20071115.507870

MARCH 2010 FILE VERSION SPECIFICS

The table below lists version specific information for the Daily and Monthly CRSP US Treasury Databases. The number of issues in the Master File is the total number of historical and current issues. The number of issues in the Cross-Sectional File is the maximum number of active issues in any month.

	DATA RANGE	TRADING INDEX RANGE	TOTAL ISSUES	MAXIMUM ACTIVE ISSUES	ACTIVE ISSUES THIS UPDATE	DATABASE SIZE - INSTALLED
Monthly Bond	19251231-20100331	1-1012	6,089	254	233	91.2 MB
Daily Bond	19610614-20100331	1-12173	4,227	254	233	997 MB

The Monthly/Daily Bond TRZ Database is 141 MB installed.

MONTHLY DATA - ORIGINAL FILES (BMZ)

All monthly directories will appear under the BMZ201003 directory under the install directory.

- `data`
- `doc` - contains the documentation in Adobe Acrobat (.pdf) format.
- `excel` - data files converted into Microsoft Excel
- `sas` - SAS data files
- `src` - FORTRAN-95 sample programs and source code
- `crsp_data_license.html` - contains our license statement, copyright and statement of use.

In the Monthly Treasury Database, in some cases, ASCII character files in the data directory contain multiple series. In these cases, a combined file is stored in the top level data directory and a subdirectory exists with the individual series. For example: the `/data/bondport` subdirectory contains `bondport12.dat` and `bondport6.dat` which were combined to create the `/data/bondport.dat` file.

DAILY DATA - ORIGINAL FILES (BDZ)

All daily directories will appear under the BDZ201003 directory under the install directory.

- `data`
- `doc` - contains the documentation in Acrobat Adobe (.pdf) format.
- `excel` - data files converted into Microsoft Excel
- `forsrc` - FORTRAN-95 sample programs and source code
- `sas` - SAS data files
- `src` - C sample programs and source code
- `crsp_data_license.html` - contains our license statement, copyright and statement of use.

The `BXDLYIND` ASCII character file in the data directory contains multiple series. In this case, the combined file is stored in the top level data directory and a subdirectory (`data\bxdlyind\`) exists with the individual series.

- Sample programs accompanying the daily bond database are in three categories based on the compilers that must be available to use them.

  - FORTRAN-95 - programs that can access text files only. Use f95_daily_bond_samp.* make files.
  - C – programs that can access text files, convert those text files to a more efficient binary form, and read those binary files. Use c_daily_bond_samp.* make files.
  - Fortran-95 via C – FORTRAN-95 programs that can read converted binary files using underlying C functions. Use f95_c_daily_bond_samp.* make files.

RECOMMENDED USE

With recent changes CRSP has made to treasuries data, our recommendation is to access the data through CRSPSift. If additional processing is needed, Sift allows for the data to be output in ASCII, SAS, Excel, and Matlab formats.

Sample code continues to be provided with the original treasury files.

The sample programming source code appears in the following directories:

LANGUAGE	ACCESS	DATA FILES TYPE	FILE LOCATION
FORTRAN-95	Sequential	Character	`/src (daily)` `/src (monthly)`
FORTRAN-95 + C functions	Sequential or Random	Binary	`/src (daily)` `/src (monthly)`
C (Daily data only)	Sequential or Random	Character or Binary	`/src (daily)`

APPENDIX

The following table is for CRSPSift TrsQuery.

CATEGORY	NEW MNEMONIC (TRZ)	ORIGINAL DAILY (BD)	ORIGINAL MONTHLY (BM)	ITEM NAME
Identifiers				
	CRSPID	CRSPID	CRSPID	CRSP-Assigned Unique ID
	RDCRSPID	CRSPID		Daily Series of Related CRSPIDs
	RDTREASNO	NEW		Daily Series of Related TREASNOs
	RMCRSPID		CRSPID	Monthly Series of Related CRSPIDs
	RMTREASNO		NEW	Monthly Series of Related TREASNOs
	TNAME	NAME	NAME	Name of Government Security
	TREASNO	NEW	NEW	Treasury Record Identifier
Descriptors & Event Data				
	IFCPDTF	FCPDTF	NEW	First Coupon Payment Date Flag
	IFLWR	FLOWER	IFLWR	Payment of Estate Tax Code
	ITAX	TAX	ITAX	Taxability of Interest
	ITYPE	TYPE	ITYPE	Type of Issue
	IUNIQ	UNIQ	IUNIQ	Uniqueness Number
	IWHY	WHY	IWHY	Reason for End of Data
	IYMCN	YMCNOT	IYMCN	Year and Month of First Call Notice
	PDINT	PDINT	PDINT(I)	Coupon Interest Payments
	TBANKDT	BANKDT	IDTBNK	Bank Eligibility Date at Time of Issue
	TCOUPRT	COUPRT	COUPRT	Coupon Rate
	TCUSIP	CUSIP	CUSIP	Treasury CUSIP
	TDATDT	DATDT	IDTDTD	Date Dated by Treasury
	TFCALDT	FCALDT	IDTCP	First Eligible Call Date
	TFCPDT	FCPDT	IDTFC	First Coupon Payment Date
	TMATDT	MATDT	IDTMAT	Maturity Date at Time of Issue
	TMFSTDAT	QDATE(FSTQUO)	QDATE(MSTART)	Date of First Monthly Data
	TMLSTDAT	QDATE(LSTQUO)	QDATE(MFINIS)	Date of Last Monthly Data
	TNIPPY	NIPPY	NIPPY	Number of Interest Payments Per Year
	TNOTICE	NOTICE	NOTICE	Notice Required on Callable Issues
	TPQDATE	PQDATE	NEW	Interest Payment Date
	TREASNOTYPE	NEW	NEW	Treasury Record Type
	TVALFC	VALFC	VALFC	Amount of First Coupon per $100 Face Value
Daily Time Series Items				
	TDACCINT	ACCINT		Daily Series of Total Accrued Interest
	TDASK	ASK		Daily Ask
	TDBID	BID		Daily Bid
	TDDURATN	DURATN		Daily Series of Macaulay's Duration
	TDNOMPRC	NEW		Daily Nominal Price
	TDNOMPRC_FLG	NEW		Daily Nominal Price Flag
	TDPDINT	PDINT		Daily Series of Paid Interest
	TDPUBOUT	PUBOUT		Daily Series of Publicly Held Outstanding
	TDRATE			Daily Published Rates
	TDRETADJ	RETADJ		Daily Adjusted Return
	TDRETNUA	RETNUA		Daily Unadjusted Return
	TDSOURCR	SOURCR		Daily Price Data Source Flag

CATEGORY	NEW MNEMONIC (TRZ)	ORIGINAL DAILY (BD)	ORIGINAL MONTHLY (BM)	ITEM NAME
	TDTOTOUT	TOTOUT		Daily Series of Total Amount Outstanding
	TDYLD	YLD		Daily Series of Promised Daily Yield
Monthly Time Series Items				
	TMACCINT		ACCINT	Monthly Series of Total Accrued Interest
	TMASK		PRIC2R	Monthly Ask
	TMBID		PRIC1R(I)	Monthly Bid
	TMDURATN		DURATN(I)	Monthly Series of Macaulay's Duration
	TMNOMPRC		NEW	Monthly Nominal Price
	TMNOMPRC_FLG		NEW	Monthly Nominal Price Flag
	TMPCYLD		PCYLD	Monthly Series of Semi-Annual Yield
	TMPDINT		PDINT	Interest Payable During Month
	TMPUBOUT		IOUT2R	Monthly Series of Publicly Held Outstanding
	TMRETADJ		RETADJ	Monthly Adjusted Return
	TMRETNUA		RETNUA	Monthly Unadjusted Return
	TMRETNXS		RETNXS	Monthly Excess Return
	TMSOURCR		SOURCR	Monthly Price Data Source
	TMTOTOUT		IOUT1R	Total Amount Outstanding
	TMYLD		YIELD	Monthly Series of Promised Daily Yield
	TMYTM		YTM	Monthly Series of Annualized Yield to Maturity
TREASNOX				
	TDYEARSTM	YEARSTM		Daily Series of Years to Maturity
	TDYTM	YTM		Daily Series of Annualized Yield to Maturity
	TIDXFAM			Treasury Index Family
	TMASKFWD			Month-Adjusted Ask Forward Rate
	TMASKRET			Month-Adjusted Ask Hold Return
	TMASKYLD			Month-Adjusted Ask Yield
	TMASKYTM			Monthly Series of Annualized Yield to Maturity
	TMAVEFWD			Month-Adjusted Average Forward Rate
	TMAVERET			Month-Adjusted Average Hold Return
	TMAVEYLD			Month-Adjusted Average Yield
	TMBIDFWD			Month-Adjusted Bid Forward Rate
	TMBIDRET			Month-Adjusted Bid Hold Return
	TMBIDYLD			Month-Adjusted Bid Yield
	TMBIDYTM			Bid Yield
	TMEWRETD			Monthly Equal Weighted Portfolio Return
	TMYEARSTM		YEARSTM	Monthly Series of Years Until Maturity
	TTERMTYPE	TERMTYPE	TERMTYPE	Term Type
Reserved for Future Use				
	TELIGDESC			Eligibility Description
	TFRGNTGT			Foreign Target Equivalent Flag
	TIDXFAM			Treasury Index Family
	TREASSYM			Treasury Symbol
	TSELDESC			Selection Description
	TSTRIPEELIG			Strip Eligibility
	TTERMLBL			Maturity and Rebalancing Label
	TTERMMAX			Max Days to Maturity to be Eligible
	TTERMMIN			Min Days to Maturity to be Eligible