



# **CRSP US TREASURY DATABASE GUIDE**

**FOR SAS, ASCII, EXCEL & R**

## CENTER FOR RESEARCH IN SECURITY PRICES

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# Chapter 1: Introduction

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## OVERVIEW

The CRSP US Treasury and Inflation Series is comprised of 1.7 million end-of-day price observations for roughly 7000 US Treasury bills, notes, and bonds, as well as supplemental files including fixed-term indexes, maturity portfolios, discount bonds, term structure and CPI files. The database begins in 1925 for month-end data, and in 1961 for daily data.

The database is updated monthly and is provided as a CRSPAccess database for use with the CRSPSift interface for Windows, and as flat files that are supported on Excel, SAS, ASCII, and R formats.

In 2010, CRSP began a modernization of the CRSP US Treasuries Data files. The daily and monthly files were synchronized to ensure consistency between the files and precision was increased. CRSP began the process of creating daily versions of the monthly supplemental files with the release of a daily Risk-Free Series.

In 2014, CRSP ceased production of a set of legacy files. This guide addresses the Treasuries CRSPAccess database, TRZ, and all versions of the flat files.

## SOURCES

Prior to January 1962, treasury data were obtained from a number of different sources. These sources include the *Wall Street Journal*, Salomon Brothers, Inc., and the Bank and Quotation Record.

Beginning with January of 1962, the majority of prices came from the Composite Closing Quotations for US Government Securities compiled by the Federal Reserve Bank of New York (FRBNY). In 1984, the quotation sheets were renamed the “Composite 3:30 P.M. Quotations for US Government Securities”. The time at which the quotes were compiled was related to the fedwire deadline the FRBNY set for the transfer of securities. The deadline was set for 2:30 p.m. Eastern Time, but was regularly extended as much as three-quarters of an hour. The FRBNY trading desk began a “closing run” at 3:00 p.m. The reference to “closing quotations” from 1962 to 1984 probably refers to the “closing run” at the FRBNY. With the close of the day on October 15, 1996 the FRBNY discontinued publication of composite quotations.

At the start of the day, October 16, 1996, our source for daily and monthly price quotations, maturity dates, and coupon rates changed to GovPX, Inc. GovPX receives its data from five inter-dealer bond brokers. Live, intra-day bids, offers and transactions in the active over-the-counter markets among these primary dealers are the source of GovPX’s 5 P.M. End-of-day US Treasury prices.

GovPX was acquired by ICAP in 2008. Beginning in February 2009, CRSP released its daily and monthly treasury databases using the ICAP data.

At the start of the day, September 3rd 2024, our source for daily and monthly price quotations, maturity dates, and coupon rates changed to a 4pm ET snapshot of ICE Data Services’ Continuous Evaluated Pricing (CEP™). Their evaluated prices are market-based measurements that are processed through a rules-based pricing system. ICE evaluated prices for U.S. government fixed income securities are overseen by a team of evaluators who monitor applicable markets in order to provide evaluations throughout the trading day.

## BID AND ASK QUOTES

The FRBNY described its listed bid price as “...the most widely quoted price from the range of quotations received”. The ask price was determined by the FRBNY based on what they expect a typical bid-ask spread to be. The rule used to make this derivation was not public domain.

GovPX described its listed bid and ask prices as the “best price”. To determine their “best price” they observe the prices from the five inter-dealer brokers and report the bid and ask prices that produce the smallest bid-ask spread.

A further distinction must be made after the acquisition of the GovPX data by ICAP. The two data sources handle bid and ask quotes differently. ICAP provides the actual bid and ask quotes, thus calculated spreads will fluctuate daily. GovPX imputed quotes from their available data. When looking at a time series of spreads, using GovPX data prior to February 2009, for the most part, they are constant. Beginning in February 2009 with the actual quotes from ICAP operations reported in their 5P.M. file, fluctuation in the spreads may be observed. In both cases the midpoints of the real and imputed spreads are very close.

ICE Data Services uses T+1 settlement for U.S. Treasury notes, bonds, TIPS, STRIPS, and U.S. Treasury bills. This is different from the T+ 0 settlement used by GovPX. The most notable difference in the data will be seen where U.S. Treasury bills reach a value of 100 on the day before maturity.

## DEBT OUTSTANDING

The total amount outstanding (TMTOTOUT, TDTOTOUT) is obtained from the *Monthly Statement of the Public Debt of the United States* published by the Treasury Department. The amount publicly held (TMPUBOUT, TDPUBOUT) is obtained from the quarterly US Treasury Bulletin up through 20110930. Beginning 20111230, data for the amount publicly held is obtained from Federal Reserve Bank of New York System Open Market Account Holdings (SOMA). The following non-derived data: issue date, coupon payable dates, bank eligibility, tax status and call status are obtained from the US Treasury Department.

## CUSIP

Prior to 1990, CUSIP was obtained from Standard & Poor’s CUSIP Directory. From January, 1990 through October 15, 1996, the CUSIP was obtained from the Composite 3:30 P.M. quotations for US Government Securities. GovPX, as of October 16, 1996, provided the CUSIP number. Since February 2009, ICAP provides CUSIP. When in question, the CUSIP is verified by *Standard & Poor’s CUSIP Directory*.

## ACCURACY

All data are checked for internal consistency with each release of the file. Secondary sources, such as the *Wall Street Journal*, are used to check suspect prices.

Considerable resources are expended in checking and improving the quality of the data. Errors are not common. Some of the errors found in checking the data are the results of inaccuracies in the initial data source. The inaccuracies are corrected as soon as possible. Other errors are CRSP coding errors; over time these coding errors are found and corrected. Historical corrections account for the differences in the data from update to update.

The CRSP data are calculated based on cash transactions on the quotation date. Our data sources prior to GovPX assumed cash transactions on delivery date, typically two business days after the quotation date. GovPX and ICAP assume cash transactions on delivery date, typically one business day after the quotation date. CRSP takes these assumptions into account when verifying the internal consistency of the files.

For callable bonds which have been called, or are likely to be called, the original maturity date is no longer valid for computing duration and yield. In these cases the anticipated call date is used as the working maturity date. This note applies to yield (tdyld/tmyld), annualized yield (tdytm/tmytm), and duration (tdduratn/tmduratn).

STATUS	YIELD AND DURATION COMPUTED TO:
CALLED	NEXT CALL DATE
CALLABLE AND PRICED AT A PREMIUM	NEXT CALL DATE
CALLABLE AND PRICED AT A DISCOUNT	MATURITY DATE
NOT CALLABLE	MATURITY DATE

Users should be cautious in interpreting yields based on issues close to maturity. Quotes on these instruments are not always reliable due to infrequent trading.

An ITYPE code of 9 is used to signal instruments having unusual provisions. A list of these instruments and their relevant provisions may be found in Appendix A.

## Chapter 2: Data File Layouts

Windows subscribers receive a CRSPAccess database (trzyyyymm\_\* folder when extracted) for use with CRSPSift. The data are organized in categories and groups for easy access. The CRSPSift User Guide provides full information for access through Sift. Treasuries Files (trzyyyymm\_\* folder when extracted) are also available in SAS, Excel, ASCII and R formats.

### CRSP TREASURIES FILES

- In the following tables, items preceded with (KY) are done so for use with SAS and Excel.
- A full list of TREASNOXs and their mappings can be found on page 40.

Files for all formats share common names with the following File Extensions:

- SAS: \*.sas7bdat
- ASCII: \*.dat
- Excel: \*xlsx
- R: \*.rds

Note: Sort column references items in each table that, combined in the prescribed order, will identify unique records. These fields are usually a combination of primary keys, dates, and other key-type fields.

### DATA CATEGORY

Each data item in each table is associated with a Data Category. The Data Category identifies the type of item and the associated formats for use with SAS, ASCII, R, and SQL.

DATA CATEGORY	DESCRIPTION	SAS TYPE	SAS FORMAT	ASCII	SQL TYPE	R TYPE
FLAG	ONE-CHARACTER FIELD - OFTEN JUST 'Y' AND 'N'	CHARACTER	\$1.		CHAR(1)	TEXT
DESCRIPTION	WIDE CHARACTER FIELD CONTAINING TEXT INFORMATION	CHARACTER	\$W.		VARCHAR(W)	TEXT
ID	FIELD CONTAINING AN ALPHANUMERIC IDENTIFIER	CHARACTER	\$W.		VARCHAR(W)	TEXT
MNEMONIC	ALPHANUMERIC FIELD CONTAINING A CODE VALUE	CHARACTER	\$W.		VARCHAR(W)	TEXT
NAME	ALPHANUMERIC FIELD FOR NAMES	CHARACTER	\$W.		VARCHAR(W)	TEXT
DATE	DATE FIELD	NUMERIC	YYYYMMDD10.	YYYY-MM-DD	DATE	DATE
START DATE	START OF A DATE RANGE - PAIRED WITH AN END DATE	NUMERIC	YYYYMMDD10.	YYYY-MM-DD	DATE	DATE
END DATE	END OF A DATE RANGE - PAIRED WITH A START DATE	NUMERIC	YYYYMMDD10.	YYYY-MM-DD	DATE	DATE
TIMESTAMP	DATE AND TIME, INCLUDING SECONDS	NUMERIC	DATETIME	YYYY-MM-DD HH:MM:SS	DATETIME	DATETIME
AMOUNT	FIXED POINT NUMBER	NUMERIC	W.N	WW.NNNNN	DECIMAL (P,N)	FLOAT
RATIO	CALCULATED FLOATING POINT NUMBER	NUMERIC	PERCENTW.N	1.234567890123E+12	FLOAT	FLOAT
VALUE	FIELD WITH A WIDE RANGE OF VALUES	NUMERIC	E20.	1.234567890123E+12	FLOAT (OR DECIMAL)	FLOAT
CODE	INTEGER FIELD THAT REPRESENTS ONE OR MORE CHARACTERISTICS	NUMERIC	W.	NNNN	INT	INT
KEY	INTEGER FIELD THAT IS USED AS A KEY	NUMERIC	W.	NNNNNNN	INT	INT
NUMBER	INTEGER VALUE < 2,000,000,000	NUMERIC	W.	NNNNNNNNNN	INT	INT

DATA CATEGORY	DESCRIPTION	SAS TYPE	SAS FORMAT	ASCII	SQL TYPE	R TYPE
QUANTITY	INTEGER FIELD WITH SOME VALUES IN EXCESS OF 2,000,000,000	NUMERIC	COMMAW.	NNNNNNNNNNNN	BIGINT	FLOAT

Missing values are displayed as follows:

- ASCII and Excel missing values, regardless of type, are an empty string
- SAS missing values are an empty string for character fields and SAS missing (displayed as a.) for numeric fields
- R missing values are an empty string for character fields, and 'R' missing (displayed as N/A) for float, int, date and datetime.

## TFZ\_ISS.\* - ISSUE DESCRIPTIONS

Treasury issue data file. Contains identifying and description information for individual treasury issues that are contained in both the daily and monthly issues files.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNO	TREASURY RECORD IDENTIFIER	TREASNO IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER. TREASNO IS THE PRIMARY KEY USED IN THE CRSPACCESS DATABASE VERSION OF THE TREASURY PRODUCT, REPLACING CRSPID THAT WAS USED IN THE LEGACY FILES.	KEY
	(KY)CRSPID	CRSP-ASSIGNED UNIQUE ID	CRSP-ASSIGNED UNIQUE IDENTIFIER AND KEY, SEE CRSPID BELOW	ID
	CRSPID	CRSP-ASSIGNED UNIQUE ID	<p>CRSPID IS THE CRSP ISSUE IDENTIFICATION NUMBER. IT IS IN FORMAT YYYYMMDD.TCCCCE WHERE:</p> <p>YYYYMMDD = MATURITY YEAR, MONTH, AND DAY (tmatdt) T = TYPE OF ISSUE (itype)</p> <p>CCCC = INTEGER PART OF COUPON RATE (tcouprt) * 100 E = UNIQUENESS NUMBER (iuniq)</p> <p>FOR EXAMPLE, 19850515.504250 IDENTIFIES A 4¼% CALLABLE BOND WHICH MATURED ON MAY 15, 1985.</p> <p>CRSPID IS A COMPOSITE VARIABLE STORED AS A CHARACTER STRING AND MAINTAINED FOR USER CONVENIENCE AND BACKWARD COMPATIBILITY. CRSP RECOMMENDS USING THE UNDERLYING VARIABLES (tmatdt, itype, tcouprt, AND iuniq) RATHER THAN EXTRACTING THE COMPONENT PARTS DIRECTLY FROM THE CRSPID.</p>	ID
	TCUSIP	TREASURY CUSIP	THE COMMITTEE ON UNIFORM SECURITY IDENTIFICATION PROCEDURES BEGAN ASSIGNING CUSIP IDENTIFICATION NUMBERS IN 1968. ISSUES THAT MATURED PRIOR TO 1968 ARE ASSIGNED THE VALUE OXX. THE EARLIEST MATURITY ON THE FILE WITH A CUSIP IS FEBRUARY 15, 1969.	ID
	TDATDT	DATE DATED BY TREASURY	<p>COUPON ISSUES ACCRUE INTEREST BEGINNING ON THE DATED DATE. THIS MAY RESULT IN A MODIFIED FIRST COUPON PAYMENT IF THE DATED DATE IS NOT A REGULAR INTEREST PAYMENT DATE.</p> <p>tmatdt IS SET TO MISSING IF NOT AVAILABLE OR APPLICABLE.</p>	DATE
	TMATDT	MATURITY DATE AT TIME OF ISSUE	THE MATURITY DATE AT THE TIME OF ISSUE FOR ALL SECURITIES EXCEPT FOR THE CONSOL BOND, WHICH IS SET TO 20990401	DATE



SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	IWHY	REASON FOR END OF DATA	0 = STILL QUOTED ON LAST UPDATE OF FILE. 1 = MATURED 2 = CALLED FOR REDEMPTION 3 = ALL EXCHANGED 4 = SOURCES NO LONGER QUOTE ISSUE	CODE
	TCOUPRT	COUPON RATE	ANNUAL RATE OF INTEREST STATED ON THE FACE OF A NOTE, BOND, OR OTHER FIXED INCOME ISSUE EXPRESSED AS A PERCENT.	AMOUNT
	TNIPPY	NUMBER OF INTEREST PAYMENTS PER YEAR	0 = TREASURY BILL OR CERTIFICATE PAYING INTEREST ONLY AT MATURITY 2 = SEMI-ANNUAL INTEREST 4 = QUARTERLY INTEREST  ALL INTEREST-BEARING NEGOTIABLE TREASURY SECURITIES ISSUED SINCE THE BEGINNING OF WWI HAVE PAID INTEREST SEMI-ANNUALLY. THE LAST OUTSTANDING ISSUE THAT PAID INTEREST QUARTERLY WAS THE PANAMA CANAL LOAN 3%'S DUE JUNE 1, 1961.	NUMBER
	TVALFC	AMOUNT OF FIRST COUPON PER \$100 FACE VALUE	AMOUNT PAID ON THE FIRST-COUPON DATE ( <i>tfcpdt</i> )	VALUE
	TFCPDT	FIRST COUPON PAYMENT DATE	THE FIRST COUPON PAYMENT DATE. ITS FLAG, <i>ifcpdtf</i> , INDICATES WHERE THE DATE IS ESTIMATED OR HAS BEEN VERIFIED.  <i>tfcpdt</i> IS SET TO MISSING FOR NON-COUPON ISSUES.	DATE
	IFCPDTF	FIRST COUPON PAYMENT DATE FLAG	VALID VALUES ARE:  -1 = ESTIMATED DATE 0 = NOT APPLICABLE 1 = VERIFIED FROM THE TREASURY OFFERING CIRCULAR	CODE
	TFCALDT	FIRST ELIGIBLE CALL DATE	FIRST ELIGIBLE CALL DATE AT TIME OF ISSUE. ALL INTEREST PAYMENT DATES BEGINNING WITH THE <i>tfcaldt</i> ARE POSSIBLE CALL DATES.  <i>tfcpdt</i> IS SET TO MISSING IF THE ISSUE IS NOT CALLABLE	DATE
	TNOTICE	NOTICE REQUIRED ON CALLABLE ISSUES	0 = NO NOTICE REQUIRED OR NOT CALLABLE 3 = 3 MONTHS NOTICE 4 = 4 MONTHS NOTICE 6 = 6 MONTHS NOTICE	NUMBER
	IYMCN	YEAR AND MONTH OF FIRST CALL NOTICE	<i>iymcn</i> IS THE MONTH AND YEAR OF THE FIRST CALL NOTICE, STORED AS A YYYYMM NUMBER. <i>iymcn</i> IS SET TO MISSING IF THE ISSUE IS NOT CALLABLE OR HAS NOT BEEN CALLED.	NUMBER
	ITYPE	TYPE OF ISSUE	1 = NONCALLABLE BOND 2 = NONCALLABLE NOTE 3 = CERTIFICATE OF INDEBTEDNESS 4 = TREASURY BILL 5 = CALLABLE BOND 6 = CALLABLE NOTE 7 = TAX ANTICIPATION CERTIFICATE OF INDEBTEDNESS 8 = TAX ANTICIPATION BILL 9 = OTHER, FLAGS ISSUES WITH UNUSUAL PROVISIONS 10= RESERVED FOR FUTURE USE 11= INFLATION-ADJUSTED BONDS 12= INFLATION-ADJUSTED NOTES	CODE

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	IUNIQ	UNIQUENESS NUMBER	UNIQUENESS NUMBER ASSIGNED TO CRSPID IF MATURITY DATE, COUPON RATE AND TYPE ARE NOT SUFFICIENT TO DISTINGUISH BETWEEN TWO SECURITIES; ZERO OTHERWISE.	CODE
	ITAX	TAXABILITY OF INTEREST	1 = FULLY TAXABLE FOR FEDERAL INCOME TAX PURPOSES. 2 = PARTIALLY TAX EXEMPT, I.E. INTEREST OF FIRST \$3000 OF BONDS OF THIS CLASS, AT PAR VALUE, EXEMPT FROM TAX SUBJECT TO SURTAX BUT NOT TO NORMAL TAX. 3 = WHOLLY TAX EXEMPT.	CODE
	IFLWR	PAYMENT OF ESTATE TAX CODE	1 = NO SPECIAL STATUS. 2 = ACCEPTABLE AT PAR AND ACCRUED INTEREST IF OWNED BY DECEDENT AT TIME OF DEATH: A FLOWER BOND. 3 = ACCEPTABLE AT PAR AND ACCRUED INTEREST IF OWNED BY DECEDENT DURING ENTIRE 6 MONTH PERIOD PRECEDING DEATH: A FLOWER BOND.	CODE
	TBANKDT	BANK ELIGIBILITY DATE AT TIME OF ISSUE	BANK ELIGIBILITY DATE AT THE TIME OF ISSUE. CONTRACTUAL EARLIEST DATE SECURITY WAS TO BECOME BANK ELIGIBLE. A SECURITY IS BANK ELIGIBLE IF A BANK MAY OWN IT. SOME 2½%’S AND 2¾%’S ISSUED DURING AND IMMEDIATELY AFTER WWII HAD LIMITED NEGOTIABILITY BECAUSE OF PROHIBITIONS AND RESTRICTIONS ON BANK OWNERSHIP. tbankdt SET TO MISSING IF NO RESTRICTIONS APPLY.  ALL REMAINING RESTRICTIONS WERE REMOVED ON JANUARY 1, 1955. THE LAST BANK ELIGIBLE CRSPID IN THE FILE IS DATED NOVEMBER 15, 1945 AND MATURED ON DECEMBER 15, 1972.	DATE
	TSTRIPELG	FUTURE USE - STRIP ELIGIBLE FLAG	DENOTES IF THE ISSUE IS ELIGIBLE TO BE BROKEN INTO COMPONENT CASH FLOWS, THAT CAN BE TRADED SEPARATELY. THIS ITEM IS RESERVED FOR FUTURE USE.	FLAG
	TFRGNTGT	FUTURE USE - FOREIGN TARGETED FLAG	RESERVED FOR FUTURE USE	FLAG

## TFZ\_MAST.\* - MASTER RECORD

Reference for daily and monthly issues, contains first and last dates of daily and monthly series

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNO (KY) TREASNOX	TREASURY RECORD IDENTIFIER (BOTH ISSUE & SUPPLEMENTAL SERIES)	TREASNO IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER. TREASNO IS THE PRIMARY KEY USED IN THE CRSPACCESS DATABASE VERSION OF THE TREASURY PRODUCT, REPLACING CRSPID THAT WAS USED IN THE LEGACY FILES. APPLIES TO ISSUES (TREASNO) AND SUPPLEMENTAL SERIES DATA (TREASNOX)	KEY
	TREASNOTYPE	TREASURY RECORD TYPE (1=ISSUE, 2=SUPPLEMENTAL SERIES)	TREASNOTYPE IS THE CODE USED TO IDENTIFY A RECORD AS A TREASNO (1) OR TREASNOX (2).	CODE
	TMFSTDAT	DATE OF FIRST MONTHLY DATA	DATE OF ISSUE'S FIRST MONTHLY DATA ON FILE	START DATE
	TMLSTDAT	DATE OF LAST MONTHLY DATA	DATE OF ISSUE'S LAST MONTHLY DATA ON FILE	END DATE
	TDFSTDAT	DATE OF FIRST DAILY DATA	DATE OF ISSUE'S FIRST DAILY DATA ON FILE	START DATE
	TDLSTDAT	DATE OF LAST DAILY DATA	DATE OF ISSUE'S LAST DAILY DATA ON FILE	END DATE
	TNAME	NAME OF GOVERNMENT SECURITY	NAME OF GOVERNMENT SECURITY TYPE. THIS VARIABLE IS BLANK FOR ALL TREASNOXS.	NAME

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TREASSYM	FUTURE USE - TREASURY TRADING SYMBOL	RESERVED FOR FUTURE USE	ID

## TFZ\_DLY.\* - DAILY TIME SERIES ITEMS

Daily time series data for individual treasury issues - Not available in Excel format

SORT	COLUMN NAME	DESCRIPTION	DEFINITION				DATA CATEGORY												
1	(KY)TREASNO	TREASURY RECORD IDENTIFIER	TREASNO IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER. TREASNO IS THE PRIMARY KEY USED IN THE CRSPACCESS DATABASE VERSION OF THE TREASURY PRODUCT, REPLACING CRSPID THAT WAS USED IN THE LEGACY FILES.				KEY												
	(KY)CRSPID	CRSP-ASSIGNED UNIQUE ID	CRSPID IS THE CRSP ISSUE IDENTIFICATION NUMBER. IT IS IN FORMAT YYYYMMDD. TCCCCE WHERE:  YYYYMMDD = MATURITY YEAR, MONTH, AND DAY (tmatdt) T = TYPE OF ISSUE (itype) CCCC = INTEGER PART OF COUPON RATE (TCOUPRT) * 100 E = UNIQUENESS NUMBER (iuniq)  FOR EXAMPLE, 19850515.504250 IDENTIFIES A 4¼% CALLABLE BOND WHICH MATURES ON MAY 15, 1985.				ID												
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION				DATE												
	TDBID	DAILY BID	DAILY SERIES OF BIDS. TDBID IS SET TO ZERO FOR MISSING.				VALUE												
	TDASK	DAILY ASK	DAILY SERIES OF ASKS. TDASK IS SET TO ZERO FOR MISSING.				VALUE												
	TDNOMPRC	DAILY NOMINAL PRICE	VALUE USED IN CRSP CALCULATIONS. FOR DAILY, THIS IS EITHER THE BID AND ASK AVERAGE OR IT IS SET TO ZERO WHEN UNAVAILABLE.				VALUE												
	TDNOMPRC_FLG	DAILY NOMINAL PRICE FLAG	<table><tr><th>INFORMATION IN DATA SOURCE</th><th>TDBID</th><th>TDASK</th><th>FLAG</th></tr><tr><td>AVERAGE OF BID AND ASK</td><td>BID</td><td>ASK</td><td>M</td></tr><tr><td>UNAVAILABLE OR MISSING</td><td>0.0</td><td>0.0</td><td>X</td></tr></table>				INFORMATION IN DATA SOURCE	TDBID	TDASK	FLAG	AVERAGE OF BID AND ASK	BID	ASK	M	UNAVAILABLE OR MISSING	0.0	0.0	X	FLAG
INFORMATION IN DATA SOURCE	TDBID	TDASK	FLAG																
AVERAGE OF BID AND ASK	BID	ASK	M																
UNAVAILABLE OR MISSING	0.0	0.0	X																
	TDSOURCR	DAILY PRICE DATA SOURCE	PRIMARY DATA SOURCE  I = ICAP 5PM J = ICAP 3PM P = INTERACTIVE DATA R = FEDERAL RESERVE BANK OF NEW YORK S = SALOMON BROTHERS W = WALL STREET JOURNAL - PRESENT (ASSOCIATED PRESS: 6/14/61-8/20/87, BLOOMBERG: 8/28/87-7/2/90, BEAR-STEARN: 12/4/90-2008) M = NO QUOTE WAS AVAILABLE X = GOVPX, INC.				FLAG												
	TDACCINT	DAILY SERIES OF TOTAL ACCRUED INTEREST	CALCULATED ON THE BASIS OF THE NUMBER OF DAYS BETWEEN INTEREST PAYMENT DATES FOR A \$100 BOND OR NOTE AND THE NUMBER OF DAYS FROM THE LAST PAYMENT DATE (OR FROM THE DATED DATE FOR THE FIRST COUPON) TO THE QUOTATION DATE.				VALUE												

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TDRETNUA	DAILY UNADJUSTED RETURN	<p>tdretnua IS THE PRICE CHANGE PLUS ACCRUED INTEREST AND PAID INTEREST, DIVIDED BY THE PREVIOUS DAY'S PRICE PLUS ACCRUED INTEREST.</p> $TDRETNUA(I) = \frac{TDNOMPRC(I) + TDPDINT(I) + TDACCINT(I)}{TDNOMPRC(I-1) + TDACCINT(I-1)} - 1.0$ <p>tdretnua IS SET TO -99 WHEN THE PRICE IS MISSING FOR EITHER THIS DAY OR THE PREVIOUS DAY.</p> <p>FOR BILLS, tdpdint AND tdaccint ARE ALWAYS ZERO AND THE EQUATION SIMPLIFIES TO:</p> $TDRETNUA(I) = \frac{TDNOMPRC(I)}{TDNOMPRC(I-1)} - 1.0$	RATIO
	TDYLD	DAILY SERIES OF PROMISED DAILY YIELD	<p>PROMISED YIELD DAILY RATE, ALSO CALLED DAILY YIELD TO MATURITY.</p> <p>ON ANY GIVEN DATE, THE PROMISED YIELD OF A SECURITY IS THE SINGLE INTEREST OR DISCOUNT RATE THAT MAKES THE SUM OF THE PRESENT VALUES OF THE PRINCIPAL AT MATURITY PLUS FUTURE INTEREST PAYMENTS EQUAL TO THE FULL PRICE OF THE SECURITY. THE FULL PRICE IS THE NOMINAL PRICE PLUS THE ACCRUED INTEREST. IF A PRICE IS MISSING, THE tdyld IS SET TO -99.</p>	RATIO
	TDDURATN	DAILY SERIES OF MACAULAY'S DURATION	<p>DURATION IS THE DAILY SERIES OF THE WEIGHTED AVERAGE NUMBER OF DAYS UNTIL THE CASH FLOWS OCCUR, WHERE THE PRESENT VALUES, DISCOUNTED BY YIELD TO MATURITY, OF EACH PAYMENT ARE USED AS THE WEIGHTS<sup>1</sup>.</p> <p>FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.</p> <p><sup>1</sup>SOME THEORETICAL PROBLEMS OF INTEREST RATES, BOND YIELDS AND STOCK PRICES IN THE UNITED STATES SINCE 1856. FREDERICK R. MACAULAY, NATIONAL BUREAU OF ECONOMIC RESEARCH, 1938, 44-53.</p> <p>MISSING VALUES ARE CODED AS -1, EXCEPT FOR SECURITIES WITH ITYPE 12 OR 13 WHICH HAVE MISSING VALUES CODED AS -99.</p>	VALUE
	TD PUBOUT	DAILY SERIES OF PUBLICLY HELD OUTSTANDING	<p>DAILY SERIES OF THE AMOUNT (FACE VALUE) HELD BY THE PUBLIC IN MILLIONS OF DOLLARS. THIS SERIES IS DERIVED FROM THE MONTHLY SERIES tmpubout . SEE TMPUBOUT FOR MORE INFORMATION. tdpubout IS SET TO MISSING WHEN UNAVAILABLE.</p>	NUMBER
	TDTOTOUT	DAILY SERIES OF TOTAL AMOUNT OUTSTANDING	<p>DAILY SERIES OF THE TOTAL AMOUNT (FACE VALUE) ISSUED AND STILL OUTSTANDING, EXPRESSED IN MILLIONS OF DOLLARS. THIS SERIES IS DERIVED FROM THE MONTHLY SERIES tmtotout. tdtotout IS SET TO MISSING WHEN UNAVAILABLE.</p>	NUMBER
	TDPDINT	DAILY SERIES OF PAID INTEREST	<p>DAILY SERIES OF COUPON INTEREST PAID SINCE THE PREVIOUS TRADING DAY. THIS FIELD IS ALWAYS ZERO FOR NON-COUPON ISSUES, AND IS ALMOST ALWAYS ZERO FOR COUPON ISSUES</p>	VALUE

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TDIDXRATIO	DAILY TIPS INDEX RATIO	THE DAILY INDEX RATIO FOR A TREASURY INFLATION PROTECTED SECURITY (TIPS) IS CALCULATED AS THE REFERENCE CPI (tdcpiref) OF A PARTICULAR DATE (CALDT) DIVIDED BY THE REFERENCE CPI (tdcpiref) OF THE ORIGINAL ISSUE DATE (tadatdt). IT IS SET TO MISSING FOR NON-TIPS.	RATIO
	TDIDXRATIO_FLG	DAILY TIPS INDEX RATIO FLAG	THE DAILY INDEX RATIO FLAG IS UNIFORMLY 'C'(CALCULATED) FOR ALL TIPS AND MISSING FOR ALL NON-TIPS	FLAG

## TFZ\_MTH.\* - MONTHLY TIME SERIES ITEMS

Monthly time series data for individual treasury issues

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY																														
1	(KY)TREASNO	TREASURY RECORD IDENTIFIER	TREASNO IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER. TREASNO IS THE PRIMARY KEY USED IN THE CRSPACCESS DATABASE VERSION OF THE TREASURY PRODUCT, REPLACING CRSPID THAT WAS USED IN THE LEGACY FILES.	KEY																														
	(KY)CRSPID	CRSP-ASSIGNED UNIQUE ID		ID																														
2	MCALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE																														
	TMBID	MONTHLY BID	MONTHLY SERIES OF BIDS ON THE LAST QUOTATION DAY OF THE MONTH. tmbid IS SET TO ZERO FOR MISSING.	VALUE																														
	TMASK	MONTHLY ASK	MONTHLY SERIES OF ASKS ON THE LAST QUOTATION DAY OF THE MONTH. tmask IS SET TO ZERO FOR MISSING.	VALUE																														
	TMNOMPRC	MONTHLY NOMINAL PRICE	VALUE USED IN CRSP CALCULATIONS, MOST OFTEN THE BID AND ASK AVERAGE. PRIOR TO 1960, BIDS AND SALES WERE USED, SEE TABLE BELOW.	VALUE																														
	TMNOMPRC_FLG	MONTHLY NOMINAL PRICE FLAG	<table> <tr> <th>INFORMATION IN DATA SOURCE</th><th>TMBID</th><th>TMASK</th><th>TMNOMPRC</th><th>FLAG</th></tr> <tr> <td>BID AND ASK</td><td>BID</td><td>ASK</td><td>(BID+ASK)/2</td><td>M</td></tr> <tr> <td>BID ONLY</td><td>BID</td><td>-BID</td><td>BID</td><td>B</td></tr> <tr> <td>SALE ONLY</td><td>SALE</td><td>0</td><td>SALE</td><td>T</td></tr> <tr> <td>UNAVAILABLE/ MISSING</td><td>0</td><td>0</td><td>0</td><td>X</td></tr> <tr> <td>FAMA BLISS SERIES</td><td>N/A</td><td>N/A</td><td>DISCOUNT</td><td>D</td></tr> </table>	INFORMATION IN DATA SOURCE	TMBID	TMASK	TMNOMPRC	FLAG	BID AND ASK	BID	ASK	(BID+ASK)/2	M	BID ONLY	BID	-BID	BID	B	SALE ONLY	SALE	0	SALE	T	UNAVAILABLE/ MISSING	0	0	0	X	FAMA BLISS SERIES	N/A	N/A	DISCOUNT	D	FLAG
INFORMATION IN DATA SOURCE	TMBID	TMASK	TMNOMPRC	FLAG																														
BID AND ASK	BID	ASK	(BID+ASK)/2	M																														
BID ONLY	BID	-BID	BID	B																														
SALE ONLY	SALE	0	SALE	T																														
UNAVAILABLE/ MISSING	0	0	0	X																														
FAMA BLISS SERIES	N/A	N/A	DISCOUNT	D																														
	TMSOURCR	MONTHLY PRICE DATA SOURCE	I = ICAP 5PM J = ICAP 3PM M = MORGAN GUARANTY P = INTERACTIVE DATA R = FEDERAL RESERVE BANK OF NEW YORK S = SALOMON BROTHERS W = WALL STREET JOURNAL X = GOVPX, INC.	FLAG																														

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TMACCINT	MONTHLY SERIES OF TOTAL ACCRUED INTEREST	CALCULATED ON THE BASIS OF THE NUMBER OF DAYS BETWEEN INTEREST PAYMENT DATES FOR A \$100 BOND OR NOTE AND THE NUMBER OF DAYS FROM THE LAST PAYMENT DATE (OR FROM THE DATED DATE FOR THE FIRST COUPON) TO THE QUOTATION DATE.	VALUE
	TMRETNUA	MONTHLY UNADJUSTED RETURN	<p>tmretnua is the price change plus accrued interest and paid interest, divided by the previous month's price plus accrued interest.</p> $TMRETNUA(I) = \frac{TMNOMPRC(I) + TMPDINT(I) + TMACCINT(I)}{TMNOMPRC(I-1) + TMACCINT(I-1)} - 1.0$ <p>tmretnua is set to -99 when the price is missing for either this month or the previous month.</p> <p>For bills, tmpdint and tmaccint are always zero and the equation simplifies to:</p> $TMRETNUA(I) = \frac{TMNOMPRC(I)}{TMNOMPRC(I-1)} - 1.0$	RATIO
	TMYLD	MONTHLY SERIES OF PROMISED DAILY YIELD	<p>tmyld IS THE PROMISED YIELD DAILY RATE, ALSO CALLED DAILY YIELD-TO-MATURITY.</p> <p>AT ANY DATE, THE PROMISED YIELD OF A SECURITY IS THE SINGLE INTEREST OR DISCOUNT RATE WHICH MAKES THE SUM OF THE PRESENT VALUES OF THE PRINCIPLE AT MATURITY AND FUTURE INTEREST PAYMENTS BE PRECISELY EQUAL TO THE FULL PRICE OF THE SECURITY. THE FULL PRICE IS THE NOMINAL PRICE, E.G., MEAN OF tmbid AND tmask, PLUS THE ACCRUED INTEREST ON THE DATE IN QUESTION. IF A PRICE IS MISSING, THE tmyld FOR THAT MONTH IS SET TO -99.</p>	RATIO
	TMDURATN	MONTHLY SERIES OF MACAULAY'S DURATION	<p>DURATION IS THE MONTHLY SERIES OF THE WEIGHTED AVERAGE NUMBER OF DAYS UNTIL THE CASH FLOWS OCCUR, WHERE THE PRESENT VALUES, DISCOUNTED BY YIELD TO MATURITY, OF EACH PAYMENT ARE USED AS THE WEIGHTS<sup>1</sup>.</p> <p>FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.</p> <p><sup>1</sup>SOME THEORETICAL PROBLEMS OF INTEREST RATES, BOND YIELDS AND STOCK PRICES IN THE UNITED STATES SINCE 1856. FREDERICK R. MACAULAY, NATIONAL BUREAU OF ECONOMIC RESEARCH, 1938, 44-53.</p>	VALUE
	TMTOTOUT	TOTAL AMOUNT OUTSTANDING	TOTAL AMOUNT (FACE VALUE) ISSUED AND STILL OUTSTANDING IN MILLIONS OF DOLLARS. SET TO MISSING FOR UNKNOWN VALUES.	NUMBER
	TMPUBOUT	MONTHLY SERIES OF PUBLICLY HELD OUTSTANDING	AMOUNT (FACE VALUE) HELD BY THE PUBLIC IN MILLIONS OF DOLLARS. THIS IS THE TOTAL AMOUNT OUTSTANDING (tmtotout) MINUS THE AMOUNT HELD IN U.S. GOVERNMENT ACCOUNTS AND FEDERAL RESERVE BANKS. THIS AMOUNT IS NOT AVAILABLE FOR TREASURY BILLS AND IS ALWAYS SET TO MISSING. AFTER DECEMBER 31, 1982, THESE NUMBERS ARE REPORTED QUARTERLY INSTEAD OF MONTHLY, AND THE REPORTED VALUES ARE CARRIED FORWARD THE NEXT TWO MONTHS	NUMBER

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TMPCYLD	MONTHLY YIELD, COMPOUNDED SEMI-ANNUALLY	$tmpcyld(l) = 2.0 * (e^{(tmyld * 182.5)} - 1.0)$ <p>IF A YIELD IS MISSING, tmpcyld(l) IS CODED AS -99</p>	RATIO
	TMRETNXS	MONTHLY EXCESS RETURN	<p>tmretnxs IS THE RETURN IN EXCESS OF WHAT WOULD HAVE BEEN COMPUTED IF THE PROMISED YIELD FROM LAST MONTH ON A SECURITY HAD REMAINED CONSTANT THROUGHOUT THE MONTH. ALTHOUGH tmretnua IS THE PRICE EQUIVALENT OF TOTAL RETURN ON A COMMON STOCK, THE VARIABILITY IN THE TIME BETWEEN QUOTATION DATES MAY CONTRIBUTE AN APPRECIABLE PART OF THE TIME-SERIES VARIANCE OF RETURN BECAUSE, EVEN WITHOUT TAKING HOLIDAYS INTO CONSIDERATION, THE TIME BETWEEN QUOTATION DATES RANGES FROM 28 TO 33 DAYS. FOR AN ISSUE YIELDING 8 PERCENT PER ANNUM, THE VARIABILITY OF RETURN INTRODUCED BY THE VARIATION IN THE TIME BETWEEN QUOTATION DATES IS ROUGHLY EQUIVALENT TO RANDOM ERRORS IN PRICE OF 1/32 OF A POINT. SUCH ERRORS AND SOME OTHER EQUALIZING DIFFERENCES AMONG RETURNS MAY BE MINIMIZED BY USING tmretnxs.</p> <p>tmretnxs IS SET TO -99 FOR MONTHS IN WHICH IT CANNOT BE CALCULATED, I.E. IF THE PRICE IS MISSING FOR EITHER THE CURRENT OR PREVIOUS MONTH.</p> $X_t = R_t - [e^{(Y_{t-1} * N_t)} - 1.0] + I_t * \frac{e^{(Y_{t-1} * C_t)} - 1.0}{P_{t-1} + A_{t-1}}$ <p>WHERE:</p> <ul style="list-style-type: none"> <li>▪ Xt is tmretnxs(t), the Excess Return for current month</li> <li>▪ Rt is tmretnua(t), the Unadjusted Return for current month</li> <li>▪ Yt-1 is tmyld(t-1), the Yield for the previous month</li> <li>▪ Nt is the number of days between mcaldt(t), the quote date for the current month, and mcaldt(t-1), the quote date for the previous month</li> <li>▪ It is tmpdint(t), the Interest Paid during the current month – Note the interest paid is usually zero and therefore the entire term is usually zero</li> <li>▪ Ct is the number of days between mcaldt(t), the quote date for the current month, and the corresponding tpqdate, the coupon payment date during the month, (i.e. where mcaldt(t-1) &lt; tpqdate &lt;= mcaldt(t))</li> <li>▪ Pt-1 is tmnomprc(t-1), the nominal price (usually bid/ask average) for previous month</li> <li>▪ At-1 is tmaccint(t-1), the accrued interest for previous month</li> </ul>	RATIO

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TMPDINT	INTEREST PAYABLE DURING MONTH	MONTHLY SERIES OF COUPON INTEREST PAID SINCE THE PREVIOUS MONTH-END QUOTATION DATE. THIS FIELD IS ALWAYS ZERO FOR NON-COUPON ISSUES, AND IS ZERO FOR COUPON ISSUES WHEN NO PAYMENT WAS MADE DURING THE MONTH.	VALUE
	TMIDXRatio	MONTHLY TIPS INDEX RATIO	THE MONTHLY INDEX RATIO FOR A TREASURY INFLATION PROTECTED SECURITY (TIPS) IS CALCULATED AS THE REFERENCE CPI (tmcpireF) OF A PARTICULAR DATE (MCALDT) DIVIDED BY THE REFERENCE CPI (tmcpiref) OF THE ORIGINAL ISSUE DATE (tmatdt). IT IS SET TO MISSING FOR NON-TIPS.	RATIO
	TMIDXRatio_FLG	MONTHLY TIPS INDEX RATIO FLAG	THE MONTHLY INDEX RATIO FLAG IS UNIFORMLY 'C' (CALCULATED) FOR ALL TIPS AND MISSING FOR ALL NON-TIPS.	FLAG

### TFZ\_DLY\_CD.\* - DAILY RATES

Contains rate data found in the legacy files, bxcalind.\*. Each CD, commercial paper, and federal funds rate is assigned a unique TREASNOX. Daily rates are assigned to each.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE TABLE BELOW FOR MAPPING TO OLD VARIABLE	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION	DATE
	TDRATE	DAILY RATES	DAILY SERIES OF PUBLISHED RATES AVAILABLE FOR THE CD RATES INDEX FAMILY, TREASNOX RANGE 2000052 – 2000060	AMOUNT

### TFZ\_MTH\_CD.\* - MONTHLY RATES

Monthly version of the daily cd files

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE BELOW FOR MAPPINGS	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	MCALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE
	TMRATE	MONTHLY RATES	MONTHLY SERIES OF PUBLISHED RATES AVAILABLE FOR THE CD RATES INDEX FAMILY, TREASNOX RANGE 2000052 – 2000060	AMOUNT

### TFZ\_PAY.\* - PAID INTEREST EVENT SERIES

Includes paid interest data for individual treasury issues.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNO	TREASURY RECORD IDENTIFIER	TREASNO IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER. TREASNO IS THE PRIMARY KEY USED IN THE CRSPACCESS DATABASE VERSION OF THE TREASURY PRODUCT, REPLACING CRSPID THAT WAS USED IN THE LEGACY FILES.	KEY



SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	(KY)CRSPID	CRSP-ASSIGNED UNIQUE ID	CRSPID IS THE CRSP ISSUE IDENTIFICATION NUMBER. IT IS IN FORMAT YYYYMMDD.TCCCC WHERE:  YYYYMMDD = MATURITY YEAR, MONTH, AND DAY (TMATDT) T = TYPE OF ISSUE (ITYPE)  CCCC = INTEGER PART OF COUPON RATE (TCOUPRT) * 100  E= UNIQUENESS NUMBER (IUNIQ)  FOR EXAMPLE, 19850515.504250 IDENTIFIES A 4¼% CALLABLE BOND WHICH MATURES ON MAY 15, 1985.	ID
2	TPQDATE	INTEREST PAYMENT DATE	DATE ON WHICH THE COUPON PAYABLE IS PAID TO THE ISSUE HOLDER.	DATE
	PDINT	COUPON INTEREST PAYMENTS	COUPON PAYABLE ON THE INTEREST PAYMENT DATE (TPQDATE). FOR ADDITIONAL INFORMATION ABOUT THE FIRST COUPON SEE <i>tvalfc</i> , <i>tfcpdt</i> , AND <i>ifcpdtf</i> .	VALUE

## SUPPLEMENTAL SERIES

### TFZ\_IDX.\* - SUPPLEMENTAL SERIES PROPERTIES

Descriptive data for all TREASNOX series

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	UNIQUE IDENTIFIER FOR SUPPLEMENTAL SERIES	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
	TIDXFAM	TREASURY INDEX FAMILY	<div><div><div><div><div>TIDXFAM</div><div>TREASNOX RANGE</div><div><div>MIN</div><div>MAX</div></div></div><div><div>BONDMATPORT</div><div>2000028</div><div>2000044</div></div><div><div>CD</div><div>2000052</div><div>2000060</div></div><div><div>DISCBOND</div><div>2000047</div><div>2000051</div></div><div><div>FIXEDTERM</div><div>2000003</div><div>2000009</div></div><div><div>RISKFREE (MTH ONLY)</div><div>2000001</div><div>2000002</div></div><div><div>RISKFREE2 (MTH/DLY)</div><div>2000061</div><div>2000063</div></div><div><div>TERMSTRUCT</div><div>2000010</div><div>2000027</div></div></div></div><div><div>tidxfam</div> provides information about to which series family a TREASNOX belongs.</div></div>	NAME
	TTERMTYPE	TERMTYPE FROM THE BXDLYIND.DAT AND BXMTHIND.DAT FILES	<div><div>ttermtype</div> FOR THE DAILY AND MONTHLY FIXED TERM INDEX FAMILY (TREASNOX 2000003-2000009) CONTAINS WHAT WAS FORMERLY THE PRIMARY KEY, TERMTYPE. THROUGH <div>ttermtype</div> IS MAINTAINED AND EXPANDED TO COVER THE NEW SERIES, IT IS A LEGACY CODE, AND USERS ARE STRONGLY ENCOURAGED TO SWITCH TO TREASNOX AS THE PRIMARY KEY FOR SUPPLEMENTAL SERIES.</div>	CODE
	TTERMMIN	MIN DAYS TO MATURITY TO BE ELIGIBLE	RESERVED FOR FUTURE USE	NUMBER
	TTERMMAX	MAX DAYS TO MATURITY TO BE ELIGIBLE	RESERVED FOR FUTURE USE	NUMBER

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TTERMLBL	MATURITY AND REBALANCING LABEL	NAME OF A TREASNOX SERIES	NAME
	TSELDISC	FUTURE USE - SELECTION DESCRIPTION	RESERVED FOR FUTURE USE	DESCRIPTION
	TELIGDESC	FUTURE USE - ELIGIBILITY DESCRIPTION	AVAILABLE FOR NEW RISK-FREE SERIES WITH TREASNOX RANGE 2000061- 2000063	DESCRIPTION

## 1. FAMA MATURITY PORTFOLIOS – MONTHLY ONLY

The Fama Maturity Portfolios are defined in 6-month intervals (TREASNOX range 2000028–2000037) and in 12-month intervals (TREASNOX range 2000040–2000044) for up to 60 months. TREASNOX 2000038 is a single portfolio for maturities between 60 and 120 months, and TREASNOX 2000039 is a single portfolio for maturities greater than 120 months. Each TREASNOX represents the portfolio containing one-month holding period returns for issues maturing in a range of months from the quote date.

Callable, non-callable, and non-flower notes and bonds are included in the portfolios. Partially and full tax-exempt issues are excluded. The returns are calculated as the equal-weighted average of the unadjusted holding period return (TMRETNUA) for each bond in the portfolio.

### TFZ\_MTH\_BP.\* - MONTHLY BOND PORTFOLIO SERIES

Monthly Bond Portfolio series

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	TREASURY RECORD IDENTIFIER	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	MCALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE
	TMEWRETD	MONTHLY EQUAL WEIGHTED PORTFOLIO RETURN	RETURN VALUE IS VALID ONLY FOR THE BOND PORTFOLIO INDEX FAMILY, REPRESENTED BY TREASNOX RANGE 2000028 – 2000044.	RATIO

## 2. FAMA-BLISS DISCOUNT BONDS – MONTHLY ONLY

The Fama-Bliss Series (TREASNOX 2000047-2000051) use only fully taxable, non-callable, non-flower issues, including IYPEs equal to 1 (Bonds), 2 (Notes), 3 (Certificates), and 4 (Bills).

### BOND SELECTION FOR TERM STRUCTURE

Four filters are used to select from the remaining bonds a subset from which to construct a term structure.

#### FIRST PASS: INITIAL CHOICE OF INSTRUMENTS

The screen on the first pass is based on two moving averages of CRSP yields to maturity on the 3 longer and 3 shorter maturity instruments surrounding the bond being considered for inclusion. Issues with the same maturity may form part of the window. Whether they are considered shorter or longer depends on the relative CRSP coupon rates. Also, 1.5% notes are excluded from windows, since these are subject to large spurious errors.

A bond is included if its yield is within 0.2% (an absolute not relative yield difference) of either average, or if its yield is between either average. The latter rule allows rapid changes in the yield curve. Multiple issues with the same maturity are permitted. Included instruments with different maturities must have maturities at least 7 days apart. Conflicts are resolved using issues in this order of preference: bill with smallest spread, bills, maturity dates with multiple issues, or issue trading closest to par.

There are refinements of the rules used to form the moving average yield windows that improve the screen.

1. The moving windows are restricted to bills as long as they are available. There are well-known liquidity problems that affect the pricing of short bonds.
2. Windows are bounded below by 0.0%.
3. The longest maturity issue is always included.

#### **SECOND PASS: CLEAN UP BIG YIELD REVERSALS**

The second pass begins to refine the discount yield term structure by deleting suspicious bonds which cause large reversals in the discount yields generated from the set of bonds included in the first pass.

A reversal is defined as a sequence of changes in the discount yield function greater than 0.2% and opposite in sign. A reversal sequence ends when there is a change less than 0.2% in the discount yield function.

When there are multiple bonds at a given maturity, they are examined separately in looking for reversals. That is, first one bond is included in the sequence of yields. Then it is dropped and the other is included. Bonds at the same maturity tend to be priced the same way, so they will break reversal sequences if they are not treated separately.

To determine which bonds in a reversal sequence are to be deleted, we go to the end of the sequence. The change in yield less than 0.2% at the end of the sequence is assumed to mean that the last change greater than 0.2% is good. Thus, we delete the second from the last in the sequence, the fourth from last, etc.

#### **THIRD PASS: RECONSIDER EXCLUDED BONDS**

With the bonds included after the second pass, a new term structure of discount yields can be calculated. The next step is to re-examine bonds excluded on the first and second passes for possible inclusion. Pass Three adds selected bonds from those previously excluded to the set of bonds included after Pass Two.

The inclusion criteria are similar to Pass One with the criteria applied to the discount yield rather than the yield to maturity.

1. The mean yields of each of two moving windows of three strictly longer and three strictly shorter maturity bonds are computed.
2. Bonds of the same maturity as the one being tested are excluded from the windows.
3. Only bonds previously included, either on Pass Two or earlier in Pass Three, may form part of the window. The 1.5% notes are no longer specifically excluded.
4. An excluded bond is put back if the discount yield at its maturity date which would result from its inclusion is within 0.2% of the mean of either the shorter or the longer window, or if it is between the two means.

#### **FOURTH PASS: LAST CHECK FOR REVERSALS**

Repeat reversal tests of Pass Two, using yields calculated from bonds included after Pass Three.

### **CALCULATION OF FORWARD RATES, DISCOUNT PRICES AND YIELDS**

The bills and bonds that survive Pass Four allow us to calculate monthly term structures of forward rates and yields for adjacent accepted maturities. Each successively longer maturity accepted allows us to calculate an additional forward rate. When there are multiple accepted bonds on a single quote date, the forward rates for each of them are calculated and the average is used as the rate for the quote date. Forward rates calculated from shorter maturity bonds are used to price the coupons for the subsequent available maturity. The coupon dates are unlikely to correspond exactly to the forward rate dates. To price coupons that fall within the period covered by a forward rate, the forward rate (always continuously compounded) is

assumed to be constant during the period, so that it can be used for any subinterval. Likewise, there may be coupons as well as a principal payment during the period from the maturity date of the last included bond to the maturity of the next longer bond. In this case, the incremental forward rate is assumed to cover the whole incremental period to the maturity of the next longer bond.

The forward rates described above cover unevenly spaced periods between the maturities of accepted bills and bonds. Under the assumption that a forward rate applies to each day of the period it covers, the forward rates can be used to calculate implied prices of artificial discount securities for maturities corresponding to future end-of-month quote dates. Equivalently, one can think of the calculations as generating daily forward rates, which are then grouped to get implied forward rates for annual intervals.

These forward rates are used to calculate prices and yields on artificial discount securities for the maturities corresponding to end-of-month quote dates one through five years in the future. To avoid having single bonds introduce spurious results only annual maturity intervals were used. This increases the signal to noise ratio. Extension of the term structure beyond 5 years is impractical due to the scarcity of qualified issues and the erratic results produced by those quotes which are available.

#### TFZ\_MTH\_FB.\* - MONTHLY FAMA BLISS DISCOUNT SERIES

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY																														
1	(KY)TREASNOX	SEE TABLE BELOW FOR MAPPING TO OLD COLUMNS	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY																														
2	MCALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE																														
	TMNOMPRC	MONTHLY ARTIFICIAL BOND DISCOUNT PRICE	VALUE USED IN CRSP CALCULATIONS, MOST OFTEN THE BID AND ASK AVERAGE. PRIOR TO 1960, BIDS AND SALES WERE USED, SEE TABLE BELOW.	VALUE																														
	TMNOMPRC_FLG	MONTHLY NOMINAL PRICE FLAG (UNIFORMLY D)	<table> <tr> <th>INFORMATION IN DATA SOURCE</th><th>TMBID</th><th>TMASK</th><th>TMNOMPRC</th><th>FLAG</th></tr> <tr> <td>BID AND ASK</td><td>BID</td><td>ASK</td><td>(BID+ASK)/2</td><td>M</td></tr> <tr> <td>BID ONLY</td><td>BID</td><td>-BID</td><td>BID</td><td>B</td></tr> <tr> <td>SALE ONLY</td><td>SALE</td><td>0</td><td>SALE</td><td>T</td></tr> <tr> <td>UNAVAILABLE/ MISSING</td><td>0</td><td>0</td><td>0</td><td>X</td></tr> <tr> <td>FAMA BLISS SERIES</td><td>N/A</td><td>N/A</td><td>DISCOUNT</td><td>D</td></tr> </table>	INFORMATION IN DATA SOURCE	TMBID	TMASK	TMNOMPRC	FLAG	BID AND ASK	BID	ASK	(BID+ASK)/2	M	BID ONLY	BID	-BID	BID	B	SALE ONLY	SALE	0	SALE	T	UNAVAILABLE/ MISSING	0	0	0	X	FAMA BLISS SERIES	N/A	N/A	DISCOUNT	D	FLAG
INFORMATION IN DATA SOURCE	TMBID	TMASK	TMNOMPRC	FLAG																														
BID AND ASK	BID	ASK	(BID+ASK)/2	M																														
BID ONLY	BID	-BID	BID	B																														
SALE ONLY	SALE	0	SALE	T																														
UNAVAILABLE/ MISSING	0	0	0	X																														
FAMA BLISS SERIES	N/A	N/A	DISCOUNT	D																														
	TMYTM	MONTHLY SERIES OF YIELD TO MATURITY (TMYLD * 36500)	MONTHLY SERIES OF THE ANNUALIZED YIELD TO MATURITY EXPRESSED AS A PERCENT PER YEAR ( $tmyld * 365 * 100$ ).  TREASNOX 2000047-2000051	RATIO																														

### 3. CRSP FIXED-TERM INDEXES – DAILY AND MONTHLY

The CRSP Fixed Term Indexes are built for 1, 2, 5, 7, 10, 20, and 30 year periods. A TREASNOX in the range 2000003-2000009 is created for each period. File names for this series are TFZ\_DLY\_FT.\* and TFZ\_MTH\_FT.\*

A valid issue that best represents each term is chosen at the end of each month and held through the next month for each of the fixed-term periods. Valid issues are at least 6 months from, but closest to the target maturity date. They are fully taxable, non-callable, and non-flower bonds. When more than one issue meets the criteria, the one most recently issued is used. If no issue meets the criteria, a second pass is made that allows flower bonds.

The series was designed to plot a sophisticated yield curve. Relevant data items are calculated for each quote date.

TERMTYPE	INDEX	MONTHLY FILE START DATE	TREASNOX
112	1 YEAR BONDS	JANUARY 31, 1941	2000003
212	2 YEAR BONDS	JANUARY 31, 1941	2000004
512	5 YEAR BONDS	APRIL 30, 1941	2000005
712	7 YEAR BONDS	APRIL 30, 1941	2000006
1012	10 YEAR BONDS	MAY 31, 1941	2000007
2012	20 YEAR BONDS	JANUARY 31, 1942	2000008
3012	30 YEAR BONDS	NOVEMBER 29, 1941	2000009

## TFZ\_DLY\_FT.\* - DAILY FIXED TERM INDEXES

Daily fixed term series. All begin on 6/14/1961.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	MAPPING BELOW FOR TERMTYPE	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION	DATE
	RDTREASNO	DAILY SERIES OF RELATED TREASNOS	DAILY SERIES OF REFERENCE TREASNOS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES. FIXED TERM FAMILY (TREASNOX 2000003- 2000009)  TREASNOX 2000003 (CONTAINS TERMTYPE 0112 ), 2000004 (0212), 2000005 (0512) , 2000006(0712)  TREASNOX 2000007 (CONTAINS TERMTYPE 1012 ), 2000008 (2012), 2000009 (3012)	KEY
	RDCRSPID	DAILY SERIES OF RELATED CRSPIDS	DAILY SERIES OF REFERENCE CRSPIDS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES. FIXED TERM FAMILY (TREASNOX 2000003-2000009) SEE ALSO CRSPID.	ID
	TDYEARSTM	DAILY SERIES OF YEARS TO MATURITY	DAILY SERIES OF THE REMAINING YEARS TO MATURITY FOR THE SELECTED ISSUE AS OF THE QUOTE DATE, CALCULATED BY DIVIDING BY 365.25 AND EXPRESSED AS A DECIMAL NUMBER OF YEARS. TREASNOX RANGE 2000003 - 2000009.	VALUE
	TDDURATN	DAILY SERIES OF MACAULAY'S DURATION	DURATION IS THE DAILY SERIES OF THE WEIGHTED AVERAGE NUMBER OF DAYS UNTIL THE CASH FLOWS OCCUR, WHERE THE PRESENT VALUES, DISCOUNTED BY YIELD TO MATURITY, OF EACH PAYMENT ARE USED AS THE WEIGHTS <sup>1</sup> .  FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.  <sup>1</sup> SOME THEORETICAL PROBLEMS OF INTEREST RATES, BOND YIELDS AND STOCK PRICES IN THE UNITED STATES SINCE 1856. FREDERICK R. MACAULAY, NATIONAL BUREAU OF ECONOMIC RESEARCH, 1938, 44-53.  MISSING VALUES ARE CODED AS -1, EXCEPT FOR SECURITIES WITH ITYPE 12 OR 13 WHICH HAVE MISSING VALUES CODED AS -99.	VALUE

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY												
	TDRETADJ	DAILY SERIES OF RETURN ADJUSTED	DAILY HOLDING PERIOD RETURN EXPRESSED AS A PERCENTAGE.  TDRETNUA * 100 TREASNOX RANGE 2000003- 2000009.	RATIO												
	TDYTM	DAILY SERIES OF YIELD TO MATURITY	ANNUALIZED YIELD-TO-MATURITY EXPRESSED AS A PERCENT PER ANNUM.  TREASNOX RANGE 2000003–2000009.  TDYTM(I)=100*TDYLD*365.0	RATIO												
	TDBID	DAILY BID	DAILY SERIES OF BIDS. tdbid IS SET TO ZERO FOR MISSING.	VALUE												
	TDASK	DAILY ASK	DAILY SERIES OF ASKS. tdask IS SET TO ZERO FOR MISSING.	VALUE												
	TDNOMPRC	DAILY NOMINAL PRICE	VALUE USED IN CRSP CALCULATIONS. FOR DAILY, THIS IS EITHER THE BID AND ASK AVERAGE OR IT IS SET TO ZERO WHEN UNAVAILABLE.	VALUE												
	TDNOMPRC_FLG	DAILY NOMINAL PRICE FLAG	<table><tr><th>INFORMATION IN DATA SOURCE</th><th>TDBID</th><th>TDASK</th><th>FLAG</th></tr><tr><td>AVERAGE OF BID AND ASK</td><td>BID</td><td>ASK</td><td>M</td></tr><tr><td>UNAVAILABLE OR MISSING</td><td>0.0</td><td>0.0</td><td>X</td></tr></table>	INFORMATION IN DATA SOURCE	TDBID	TDASK	FLAG	AVERAGE OF BID AND ASK	BID	ASK	M	UNAVAILABLE OR MISSING	0.0	0.0	X	FLAG
INFORMATION IN DATA SOURCE	TDBID	TDASK	FLAG													
AVERAGE OF BID AND ASK	BID	ASK	M													
UNAVAILABLE OR MISSING	0.0	0.0	X													
	TDACCINT	DAILY SERIES OF TOTAL ACCRUED INTEREST	CALCULATED ON THE BASIS OF THE NUMBER OF DAYS BETWEEN INTEREST PAYMENT DATES FOR A \$100 BOND OR NOTE AND THE NUMBER OF DAYS FROM THE LAST PAYMENT DATE (OR FROM THE DATED DATE FOR THE FIRST COUPON) TO THE QUOTATION DATE.	RATIO												

#### TFZ\_MTH\_FT.\* - MONTHLY FIXED TERM INDEXES

Monthly fixed term series.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE MAPPINGS BELOW FOR TERMTYPE	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION	DATE
	RMTREASNO	MONTHLY SERIES OF RELATED TREASNOs	MONTHLY SERIES OF REFERENCE TREASNOs WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX 2000003 (CONTAINS TERMTYPE 0112 ), 2000004 (0212), 2000005 (0512) , 2000006(0712)  TREASNOX 2000007 (CONTAINS TERMTYPE 1012 ), 2000008 (2012), 2000009 (3012)	KEY
	RMCRSPID	MONTHLY SERIES OF RELATED CRSPIDS	MONTHLY SERIES OF REFERENCE CRSPIDS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX 2000003 - 20000009	ID
	TMYEARSTM	MONTHLY SERIES OF YEARS TO MATURITY	MONTHLY SERIES OF THE REMAINING YEARS-TO-MATURITY FOR THE SELECTED ISSUE AS OF THE QUOTE DATE, CALCULATED BY DIVIDING BY 365.25 AND EXPRESSED AS A DECIMAL NUMBER OF YEARS.  TREASNOX RANGE 2000003- 2000009.	VALUE

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY																														
	TMDURATN	MONTHLY SERIES OF MACAULAY'S DURATION	<p>DURATION IS THE MONTHLY SERIES OF THE WEIGHTED AVERAGE NUMBER OF DAYS UNTIL THE CASH FLOWS OCCUR, WHERE THE PRESENT VALUES, DISCOUNTED BY YIELD TO MATURITY, OF EACH PAYMENT ARE USED AS THE WEIGHTS<sup>1</sup>.</p> <p>FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.</p> <p><sup>1</sup>SOME THEORETICAL PROBLEMS OF INTEREST RATES, BOND YIELDS AND STOCK PRICES IN THE UNITED STATES SINCE 1856. FREDERICK R. MACAULAY, NATIONAL BUREAU OF ECONOMIC RESEARCH, 1938, 44-53.</p>	VALUE																														
	TMRETADJ	MONTHLY SERIES OF RETURN ADJUSTED (TMRETNUA * 100)	THE MONTHLY HOLDING PERIOD RETURN EXPRESSED AS A PERCENTAGE (tmretnua * 100). SEE ALSO tmretnua.	RATIO																														
	TMYTM	MONTHLY SERIES OF YIELD TO MATURITY (TMYLD * 36500)	MONTHLY SERIES OF THE ANNUALIZED YIELD TO MATURITY EXPRESSED AS A PERCENT PER YEAR (tmyld * 365 * 100).	RATIO																														
	TMBID	MONTHLY BID	MONTHLY SERIES OF BIDS ON THE LAST QUOTATION DAY OF THE MONTH. tmbid IS SET TO ZERO FOR MISSING.	VALUE																														
	TMASK	MONTHLY ASK	MONTHLY SERIES OF ASKS ON THE LAST QUOTATION DAY OF THE MONTH. tmask IS SET TO ZERO FOR MISSING.	VALUE																														
	TMNOMPRC	MONTHLY NOMINAL PRICE	VALUE USED IN CRSP CALCULATIONS, MOST OFTEN THE BID AND ASK AVERAGE. PRIOR TO 1960, BIDS AND SALES WERE USED, SEE TABLE BELOW.	VALUE																														
	TMNOMPRC_FLG	MONTHLY NOMINAL PRICE FLAG	<table> <tr> <th>INFORMATION IN DATA SOURCE</th><th>TMBID</th><th>TMASK</th><th>TMNOMPRC</th><th>FLAG</th></tr> <tr> <td>BID AND ASK</td><td>BID</td><td>ASK</td><td>(BID+ASK)/2</td><td>M</td></tr> <tr> <td>BID ONLY</td><td>BID</td><td>-BID</td><td>BID</td><td>B</td></tr> <tr> <td>SALE ONLY</td><td>SALE</td><td>0</td><td>SALE</td><td>T</td></tr> <tr> <td>UNAVAILABLE/ MISSING</td><td>0</td><td>0</td><td>0</td><td>X</td></tr> <tr> <td>FAMA BLISS SERIES</td><td>N/A</td><td>N/A</td><td>DISCOUNT</td><td>D</td></tr> </table>	INFORMATION IN DATA SOURCE	TMBID	TMASK	TMNOMPRC	FLAG	BID AND ASK	BID	ASK	(BID+ASK)/2	M	BID ONLY	BID	-BID	BID	B	SALE ONLY	SALE	0	SALE	T	UNAVAILABLE/ MISSING	0	0	0	X	FAMA BLISS SERIES	N/A	N/A	DISCOUNT	D	FLAG
INFORMATION IN DATA SOURCE	TMBID	TMASK	TMNOMPRC	FLAG																														
BID AND ASK	BID	ASK	(BID+ASK)/2	M																														
BID ONLY	BID	-BID	BID	B																														
SALE ONLY	SALE	0	SALE	T																														
UNAVAILABLE/ MISSING	0	0	0	X																														
FAMA BLISS SERIES	N/A	N/A	DISCOUNT	D																														
	TMACCINT	MONTHLY SERIES OF TOTAL ACCRUED INTEREST	CALCULATED ON THE BASIS OF THE NUMBER OF DAYS BETWEEN INTEREST PAYMENT DATES FOR A \$100 BOND OR NOTE AND THE NUMBER OF DAYS FROM THE LAST PAYMENT DATE (OR FROM THE DATED DATE FOR THE FIRST COUPON) TO THE QUOTATION DATE.	VALUE																														

#### 4. CRSP RISK-FREE RATES FILE

The historic Monthly Risk-Free Rates file is the first of two Risk-Free Rate Series provided by CRSP. The monthly-only series begin in 1925 and are the same as those in the legacy treasury files. Two TREASNOXs represent the Risk-Free Series:

- 2000001 – 1-month rates, and
- 2000002 – 3-month rates.

The file name of this series is TFZ\_MTH\_RF.\* Three yields are provided for each series based on the bid, asked and average prices. Yields are continuously compounded 365 day rates. The CRSP identifier of the selected issue security used and the number of days to maturity of that issue are also provided.

The Treasury Bill selected in the 1-month series that is chosen has a minimum of 30 days to maturity, and is the closest T-Bill

to 30 days to maturity. The 3-month series used a 90 day target.

When building this series, where bills were not available certificates and, in a few cases, notes were used. In early periods, the selection among alternatives was subjective at times. The issue with the maturity closest to target was sometimes rejected because the quotes were suspicious. In no case was an issue used which did not mature on its next coupon payment date. Also excluded were issues with bid quotations implying negative yields. This resulted in some very short nominally three month maturities prior to 1942. Similarly, scarcity of available issues results in some very long nominal one month issues being used prior to 1937. The range of maturities of both series after 1942 is within a few days of the targets. Users may wish to restrict their usage to this period.

Prior to 1938 bids and asks were not always available. In these cases the available data was a trade price. The bid and average yields were set to the trade yield and the ask yield was set to missing. Bid and average yields were never missing. Valid ask and average yields may actually be negative.

## CRSP DAILY AND MONTHLY RISK-FREE RATE SERIES

The CRSP Daily and Monthly Risk-Free Rate Series is a slight modification of the historical monthly series that is included in the Treasuries Product. Daily and monthly series begin in 1961 and are represented by three TREASNOXs:

- 2000061 – 4-week rates
- 2000062 – 13-week rates, and
- 2000063 – 26-week rates.

The file names of this series are TFZ\_DLY\_RF2.\* and TFZ\_MTH\_RF2.\*

### DURATION RANGE OF SELECTED BILLS:

- 4-week bills run from 22 days to 28 days. Through 12/31/2010 there are about 79 cases where 29 days to maturity is used due to Thursday holidays.
- 13-week bills run from 85 days to 91 days. Through 12/31/2010 there are about 84 cases where 92 days to maturity is used due to Thursday holidays.
- 26-week bills run from 176 days to 182 days. Through 12/31/2010 there are about 82 cases where 183 days to maturity is used due to Thursday holidays. There is also one week at the end of September 1987 where a 25- week bill (169 days to 175 days) was used, because the auction of the 3/24/1988 bill was delayed 10 days due to Congressional inaction on raising the debt limit.

## TFZ\_MTH\_RF.\* - MONTHLY RISKFREE SERIES (1-MONTH AND 3-MONTH)

Monthly risk-free series beginning in 1925.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE MAPPINGS BELOW	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	MCALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE
	RMTREASNO	MONTHLY SERIES OF RELATED TREASNOS	MONTHLY SERIES OF REFERENCE TREASNOS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX 2000001- 2000002	KEY



SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	RMCRSPID	MONTHLY SERIES OF RELATED CRSPIDS	MONTHLY SERIES OF REFERENCE CRSPIDS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX 2000001 - 20000002	ID
	TMBIDYTM	MONTHLY ANNUALIZED YIELD CALCULATED FROM BID	MONTHLY SERIES OF YIELD-TO-MATURITY BASED ON THE MONTHLY BID AMOUNT.  ANNUALIZED PERCENT (YIELD*365*100).	RATIO
	TMASKYTM	MONTHLY ANNUALIZED YIELD CALCULATED FROM ASK	MONTHLY SERIES OF YIELD-TO-MATURITY BASED ON THE MONTHLY ASK AMOUNT.  ANNUALIZED PERCENT (YIELD*365*100).	RATIO
	TMYTM	MONTHLY SERIES OF YIELD TO MATURITY	MONTHLY SERIES OF THE ANNUALIZED YIELD TO MATURITY EXPRESSED AS A PERCENT PER YEAR ( $tmyld * 365 * 100$ ).	RATIO
	TMDURATN	MONTHLY SERIES OF MACAULAY'S DURATION	FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.	NUMBER

#### TFZ\_DLY\_RF2.\* - DAILY RISKFREE SERIES (4-, 13-, AND 26-WEEK)

Daily risk-free series. Data series begins June 15, 1961.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX		TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION	DATE
	RDREASNO	DAILY SERIES OF RELATED TREASNO	DAILY SERIES OF REFERENCE TREASNO WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX 2000061 (CONTAINS 4-WEEK SERIES ), 2000062 (13-WEEK SERIES), 2000063 (26-WEEK SERIES)	KEY
	RDREASNO_FLG	FLAG ASSOCIATED WITH RDREASNO - A OR O	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE TREASNO.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED	FLAG
	RDCRSPID	DAILY SERIES OF RELATED CRSPIDS	DAILY SERIES OF REFERENCE CRSPIDS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES. TREASNOX 2000061-2000063.	ID
	RDCRSPID_FLG	FLAG ASSOCIATED WITH RDCRSPID - A OR O	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE CRSPID.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED	FLAG
	TDBIDYLD	DAILY SERIES OF PROMISED DAILY YIELD BASED ON BID	DAILY SERIES OF YIELD BASED ON THE BID AMOUNT.	RATIO
	TDBIDYLD_FLG	FLAG ASSOCIATED WITH TDBIDYLD - CURRENTLY ALWAYS 'B'	$tdbidyld\_flg$ HAS VALID VALUES OF: B = BID	FLAG
	TDASKYLD	DAILY SERIES OF PROMISED DAILY YIELD BASED ON ASK	DAILY SERIES OF YIELD BASED ON THE ASK AMOUNT.	RATIO

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TDASKYLD_FLG	FLAG ASSOCIATED WITH TDBIDYLD - CURRENTLY ALWAYS 'A'	tdaskyld_flg HAS VALID VALUES OF:  A = ASK	FLAG
	TDYLD	DAILY SERIES OF PROMISED DAILY YIELD BASED ON TDNOMPRC	tdyld IS THE PROMISED YIELD DAILY RATE, ALSO CALLED DAILY YIELD TO MATURITY.  ON ANY GIVEN DATE, THE PROMISED YIELD OF A SECURITY IS THE SINGLE INTEREST OR DISCOUNT RATE THAT MAKES THE SUM OF THE PRESENT VALUES OF THE PRINCIPAL AT MATURITY PLUS FUTURE INTEREST PAYMENTS EQUAL TO THE FULL PRICE OF THE SECURITY. THE FULL PRICE IS THE NOMINAL PRICE PLUS THE ACCRUED INTEREST. IF A PRICE IS MISSING, THE tdyld IS SET TO -99.	RATIO
	TDYLD_FLG	FLAG ASSOCIATED WITH TDBIDYLD	VALID VALUES OF THE FLAG FOR YIELD BASED ON TDNOMPRC:  M = MEAN OF BID AND ASK CURRENTLY ALWAYS "M"	FLAG
	TDDURATN	DAILY SERIES OF MACAULAY'S DURATION	FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.	NUMBER

#### TFZ\_MTH\_RF2.\* - MONTHLY RISKFREE SERIES (4-, 13-, AND 26-WEEK)

New monthly risk-free series. Data begin June 30, 1961.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE MAPPINGS BELOW FOR TERMTYPE	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION	DATE
	RMTREASNO	MONTHLY SERIES OF RELATED TREASNOs	MONTHLY SERIES OF REFERENCE TREASNOs WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX 2000061 (CONTAINS 4-WEEK SERIES ), 2000062 (13-WEEK SERIES), 2000063 (26-WEEK SERIES)	KEY
	RMTREASNO_FLG	FLAG ASSOCIATED WITH RMTREASNO	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE TREASNO.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED  TREASNOX 2000061-2000063.	FLAG
	RMCRSPID	MONTHLY SERIES OF RELATED CRSPIDs	MONTHLY SERIES OF REFERENCE CRSPIDs WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.	ID
	RMCRSPID_FLG	FLAG ASSOCIATED WITH RMCRSPID	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE CRSPID.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED  TREASNOX 2000061-2000063.	FLAG

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TMBIDYLD	MONTH-END DAILY BID YIELD	MONTHLY SERIES OF YIELDS BASED ON THE BID ( <i>tmbid</i> ). FOR THE 4-WEEK, 13-WEEK, AND 26-WEEK RISKFREE SERIES (TREASNOX 2000061- 2000063), <i>tmbidyld</i> IS THE MONTH-END DAILY YIELD.	RATIO
	TMBIDYLD_FLG	FLAG ASSOCIATED WITH TMBIDYLD	<i>tmbidyld_flg</i> HAS VALID VALUES OF:  B = BID	FLAG
	TMASKYLD	MONTH-END DAILY ASK YIELD	MONTHLY SERIES OF YIELDS BASED ON THE ASK ( <i>tmask</i> ). FOR THE 4-WEEK, 13-WEEK, AND 26-WEEK RISKFREE SERIES (TREASNOX 2000061- 2000063), <i>tmaskyld</i> IS THE MONTH-END DAILY YIELD.	RATIO
	TMASKYLD_FLG	FLAG ASSOCIATED WITH TMBIDYLD	<i>tmaskyld_flg</i> HAS VALID VALUES OF:  A = ASK	FLAG
	TMYLD	MONTHLY SERIES OF PROMISED YIELD BASED ON TMNOMPRC	<i>tmyld</i> IS THE PROMISED YIELD DAILY RATE, ALSO CALLED DAILY YIELD-TO-MATURITY.  AT ANY DATE, THE PROMISED YIELD OF A SECURITY IS THE SINGLE INTEREST OR DISCOUNT RATE WHICH MAKES THE SUM OF THE PRESENT VALUES OF THE PRINCIPLE AT MATURITY AND FUTURE INTEREST PAYMENTS BE PRECISELY EQUAL TO THE FULL PRICE OF THE SECURITY. THE FULL PRICE IS THE NOMINAL PRICE, E.G., MEAN OF TMBID AND TMASK, PLUS THE ACCRUED INTEREST ON THE DATE IN QUESTION. IF A PRICE IS MISSING, THE <i>tmyld</i> FOR THAT MONTH IS SET TO -99.	RATIO
	TMYLD_FLG	FLAG ASSOCIATED WITH TMBIDYLD	VALUES ARE: M = BID/ASK MEAN CURRENTLY ALWAYS "M"	FLAG
	TMDURATN	MACAULAY'S DURATION	FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.	NUMBER

## TERM STRUCTURE FILES

CRSP creates two sets of Term Structure Files. The long-standing Fama Treasury Bill Term Structure files are produced monthly-only, the 6-month series begin in 1950 and the 12-month series begin in 1963. CRSP also produces a second set of daily/monthly 26-week term structure files that begin at various points in 1961.

### 1. FAMA TS FILES – MONTHLY ONLY

The Term Structure Files are calculated in three alternative ways using the:

- Average of the bid and ask quotes
- Bid quotes
- Ask quotes

Data items are derived from using six-month and 12-month Treasury bills. For each type of bill, Forward Rates, Yields, and Holding Period Returns are calculated.

Each series is built by selecting the bill closest to either six or 12 months to maturity, and then following that bill through to maturity. Each term structure series is accessed by a TREASNOX.

12-month series are represented by the TREASNOX range 2000010-2000021, with each TREASNOX representing a different number of months to maturity, between one and 12. The 12-month representative bill used was the longest bill with more than 11 months and 10 days to maturity. This can result in a large variation between target and actual maturities. It should also be noted there are significant missing values from early 2000 to 2009, when the Treasury switched to quarterly releases and then did not issue a 52-week bill for over seven years from 3/1/2001 to 6/5/2008.

Six-month series are represented by the TREASNOX range 2000022-2000027, with each TREASNOX representing a different number of months to maturity, between one and 6. The six-month bills have been extended back in time so that prior to the availability of six-month bills, three-month bills were used, and before that, one-month bills were used. The representative six-month bill was the closest bill to the target maturity with a maximum of four days variation on either side of the maturity.

Users interested in short maturities should use the six-month bills or the Risk-Free Rates rather than the 12-month files.

## COMPUTATION OF FAMA T-BILL FILES

Let:

$P_{t,\tau}$  = price of bill with  $\tau$  months to maturity observed at time  $t$

$N_{t,\tau}$  = number of days to maturity of a  $\tau$  month bill at time  $t$

Then:

$Y_{t,\tau}$  = yield to maturity of a  $\tau$  month bill observed at time  $t$

$$Y_{t,\tau} = \left[ \ln \left( \frac{100}{P_{t,\tau}} \right) \right] \left( \frac{30.4}{N_{t,\tau}} \right)$$

$F_{t,\tau}$  = forward rate from  $F_{t,\tau}$  to  $t + \tau$  observed at time  $t$

$$F_{t,\tau} = \left[ \ln \left( \frac{P_{t,\tau-1}}{P_{t,\tau}} \right) \right] \left( \frac{30.4}{N_{t,\tau} - N_{t,\tau-1}} \right)$$

$H_{t,\tau}$  = one month holding period return for a  $\tau$  month bill bought at time  $t$  and sold at time  $t+1$  (when it has  $\tau-1$  months remaining to maturity). Note that in the return files, the date for  $H_{t,\tau}$  is the purchase month  $t$ .

$$H_{t,\tau} = \left[ \ln \left( \frac{P_{t+1,\tau-1}}{P_{t,\tau}} \right) \right] \left( \frac{30.4}{N_{t,\tau} - N_{t+1,\tau-1}} \right)$$

By convention,  $\tau = 0$  at maturity. Therefore, when  $P_{t,0} = 100$ ,  $Y_{t,1} = F_{t,1} = H_{t,1}$ .

The computations do not include transaction costs. All yields, rates and returns have been standardized to a 30.4 day basis and are therefore directly comparable.

## TFZ\_MTH\_TS.\* - MONTHLY TERM STRUCTURE SERIES

Monthly term structure files. Individual files in the monthly legacy format are consolidated into this single file in the new flat files.

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE MAPPINGS BELOW	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	MCALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	RMTREASNO	MONTHLY SERIES OF RELATED TREASNOS	MONTHLY SERIES OF REFERENCE TREASNOS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX RANGE 2000010 - 2000027	KEY
	RMCRSPID	MONTHLY SERIES OF RELATED CRSPIDS	MONTHLY SERIES OF REFERENCE CRSPIDS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX RANGE 2000010 - 2000027	ID
	TMDURATN	MACAULAY'S DURATION	FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.	NUMBER
	TMBID	MONTHLY BID	MONTHLY SERIES OF BIDS ON THE LAST QUOTATION DAY OF THE MONTH. TMBID IS SET TO ZERO FOR MISSING.	VALUE
	TMBIDRET	MONTH-ADJUSTED BID HOLD RETURN	MONTHLY VALUE OF HOLDING PERIOD RETURNS BASED ON BID, ADJUSTED ON A 30.4 DAY MONTHLY BASIS.	RATIO
	TMBIDYLD	MONTH-ADJUSTED BID YIELD	MONTHLY SERIES OF YIELDS BASED ON THE BID (TMBID). TMBIDYLD IS A MONTH-ADJUSTED (30.4 DAY BASIS).	RATIO
	TMBIDFWD	MONTH-ADJUSTED BID FORWARD RATE	MONTHLY VALUE OF BID FORWARD RATES ADJUSTED ON A 30.4 DAY MONTHLY BASIS.	RATIO
	TMASK	MONTHLY ASK	MONTHLY SERIES OF ASKS ON THE LAST QUOTATION DAY OF THE MONTH. TMASK IS SET TO ZERO FOR MISSING.	VALUE
	TMASKRET	MONTH-ADJUSTED ASK HOLD RETURN	MONTHLY VALUE OF HOLDING PERIOD RETURNS BASED ON ASK, ADJUSTED ON A 30.4 DAY MONTHLY BASIS.	RATIO
	TMASKYLD	MONTH-ADJUSTED ASK YIELD	MONTHLY SERIES OF YIELDS BASED ON THE ASK (TMASK). TMASKYLD IS A MONTH-ADJUSTED (30.4 DAY BASIS).	RATIO
	TMASKFWD	MONTH-ADJUSTED ASK FORWARD RATE	MONTHLY VALUE OF ASK FORWARD RATES ADJUSTED ON A 30.4 DAY MONTHLY BASIS	RATIO
	TMNOMPRC	MONTHLY NOMINAL PRICE (BID/ASK AVERAGE)	VALUE USED IN CRSP CALCULATIONS, MOST OFTEN THE BID AND ASK AVERAGE. PRIOR TO 1960, BIDS AND SALES WERE USED, SEE TABLE BELOW.	VALUE
	TMNOMPRC_FLG	MONTHLY NOMINAL PRICE FLAG		FLAG
	TMAVERET	MONTH-ADJUSTED AVERAGE HOLD RETURN	VALUE USED IN CRSP CALCULATIONS, MOST OFTEN THE BID AND ASK AVERAGE. PRIOR TO 1960, BIDS AND SALES WERE USED, SEE TABLE BELOW.	RATIO
	TMAVEYLD	MONTH-ADJUSTED AVERAGE YIELD	MONTHLY VALUE OF AVERAGE YIELDS BASED ON NOMINAL PRICE (MOST OFTEN BID/ASK AVERAGE) ON A 30.4 DAY MONTHLY BASIS.	RATIO
	TMAVEFWD	MONTH-ADJUSTED AVERAGE FORWARD RATE	MONTHLY VALUE OF AVERAGE FORWARD RATES BASED ON NOMINAL PRICE (MOST OFTEN BID/ASK AVERAGE) ON A 30.4 DAY MONTHLY BASIS	RATIO

## 2. TREASURY BILL 26-WEEK TERM STRUCTURE FILES – DAILY AND MONTHLY

The 26-Week Term Structure Files are calculated in three alternative ways using the:

- Nominal Price (Average of the bid and ask quotes)
- Bid quotes
- Ask quotes

There are 26 series. The one-week series is TREASNOX 2000064, the two-week series is TREASNOX 2000065 through the

26-week series which is TREASNOX 2000089.

Data items are derived using regular cycle 26-week bills. These bills have Thursday maturities, unless Thursday is a holiday, and then it is a Friday maturity. A bill is selected on Thursday with 26-weeks to maturity and then used through the following Wednesday. On the next Thursday, it becomes the 25-week bill, and a new 26-week bill is selected and this process repeated for each series. For example, on Thursday July 1, 2010, the 26-week series (TREASNOX 2000089) selects the bill that matured on Thursday 12/30/2010. On July 8, the 12/30/2010 bill is used for the 25-week series (TREASNOX 2000088), and a new 26-week bill is selected; the one that matures on 1/6/2011.

## COMPUTATION OF THE FIELDS

The calculations of items that follow use items from the daily series. The monthly series are simply the month-end values of the daily series.

- TDBID, TDASK, and TDNOMPRC:  $P_{(t,w)}$  = The price (could be bid, ask, or nomprc) on day  $t$  for a bill maturing in  $w$  weeks.
- TDDURATN:  $N_{(t,w)}$  = The number of days to maturity on day  $t$  for a bill maturing in  $w$  weeks.
- TDBIDYLD, TDASKYLD, and TDYLD:  $Y_{t,w} = \frac{\ln\left(\frac{100}{P_{t,w}}\right)}{N_{t,w}}$ . This is the daily continuously compounded yield to maturity on day  $t$  for a bill maturing in  $w$  weeks.
- TDBIDFWD1, TDBIDFWD4, TDASKFWD1, TDASKFWD4, TDAVEFWD1, TDAVEFWD4:

$F_{t,w} = \frac{\ln\left(\frac{P_{t,w-\tau}}{P_{t,w}}\right)}{N_{t,w} - N_{t,w-\tau}}$  is the formula used for calculating the forward rate for tau offset of both 1-week and 4-weeks. For convenience, the denominators ( $N_{(t,w)} - N_{(t,w-\tau)}$ ) are stored in the TDDURFWD1 and TDDURFWD4 variables.

- TDBIDHLD1, TDBIDHLD4, TDASKHLD1, TDASKHLD4, TDAVEHLD1, TDAVEHLD4

$H_{t,w} = \frac{\ln\left(\frac{P_{t+\tau,w-\tau}}{P_{t,w}}\right)}{N_{t,w} - N_{t+\tau,w-\tau}}$  is the formula used for calculating the forward rate for tau offset of both 1-week and 4-weeks. For convenience, the denominators ( $N_{(t,w)} - N_{(t+\tau,w-\tau)}$ ) are stored in the TDDURHLD1 and TDDURHLD4 variables.

## MISSING VALUES

While the new 26-week term structure series does not have the 12-month series seven year gap, these series do have missing values that should be noted.”. The 1-week series (TREASNOX 2000064) contains no 1-week or 4-week forward rates or 1-week or 4-week holding period returns, because price for the comparison bill cannot exist. Similarly, the 2-week series (2000065), 3-week series (2000066), and 4-week series (2000067) contain no 4-week forward rates or 4-week holding period returns.

At the beginning of the series, the 26-week series (TREASNOX 2000089) starts on 6/15/1961, the 25-week series (2000088) a week later, etc. and the 1-week series (2000064) begins on 12/7/1961. So full data for all series is not available until roughly 1/1/1962. At the end of the series, the holding period returns are not available, because the comparison price is beyond the last available date for prices in the data.

The market closures around 9/11 also introduce missing values in the daily series that are not in the monthly series.

## TRZ\_DLY\_TS2.\* - DAILY 26-WEEK TERM STRUCTURE

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE MAPPINGS BELOW	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION	DATE
	RDTREASNO	DAILY SERIES OF RELATED TREASNOS	DAILY SERIES OF REFERENCE TREASNOS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.  TREASNOX 2000064 (1-WEEK SERIES), 2000065 (2-WEEK) . 2000088 (25-WEEK), 2000089 (26-WEEK)	KEY
	RDTREASNO_FLG	REFERENCE TREASNO FLAG	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE TREASNO.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED	FLAG
	RDCRSPID	DAILY SERIES OF RELATED CRSPIDS	DAILY SERIES OF REFERENCE CRSPIDS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES.	ID
	RDCRSPID_FLG	REFERENCE CRSPID FLAG	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE CRSPID.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED	FLAG
	TDBID	DAILY BID	DAILY SERIES OF BIDS. TDBID IS SET TO ZERO FOR MISSING.	VALUE
	TDASK	DAILY ASK	DAILY SERIES OF ASKS. TDASK IS SET TO ZERO FOR MISSING.	VALUE
	TDNOMPRC	DAILY NOMINAL PRICE	VALUE USED IN CRSP CALCULATIONS. FOR DAILY, THIS IS EITHER THE BID AND ASK AVERAGE OR IT IS SET TO ZERO WHEN UNAVAILABLE.	VALUE
	TDBIDYLD	DAILY-ADJUSTED BID YIELD	DAILY SERIES OF YIELD BASED ON THE BID AMOUNT.	RATIO
	TDASKYLD	DAILY-ADJUSTED ASK YIELD	DAILY SERIES OF YIELD BASED ON THE ASK AMOUNT	RATIO
	TDYLD	DAILY SERIES OF PROMISED DAILY YIELD	TDYLD IS THE PROMISED YIELD DAILY RATE, ALSO CALLED DAILY YIELD TO MATURITY.  ON ANY GIVEN DATE, THE PROMISED YIELD OF A SECURITY IS THE SINGLE INTEREST OR DISCOUNT RATE THAT MAKES THE SUM OF THE PRESENT VALUES OF THE PRINCIPAL AT MATURITY PLUS FUTURE INTEREST PAYMENTS EQUAL TO THE FULL PRICE OF THE SECURITY. THE FULL PRICE IS THE NOMINAL PRICE PLUS THE ACCRUED INTEREST. IF A PRICE IS MISSING, THE TDYLD IS SET TO -99.	RATIO
	TDDURATN	DAILY SERIES OF MACAULAY'S DURATION	FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.	NUMBER
	TDBIDFWD1	1-WEEK FORWARD BID RATE	DAILY SERIES OF 1-WEEK DAY-ADJUSTED FORWARD RATES BASED ON BID	RATIO
	TDASKFWD1	1-WEEK FORWARD ASK RATE	DAILY SERIES OF 1-WEEK DAY-ADJUSTED FORWARD RATES BASED ON ASK	RATIO
	TDAVEFWD1	1-WEEK FORWARD NOMPRC RATE	DAILY SERIES OF 1-WEEK DAY-ADJUSTED FORWARD RATES BASED ON NOMINAL PRICES (BID/ASK AVERAGE)	RATIO
	TDDURFWD1	DAYS USED FOR 1-WEEK FORWARD RATE	DAILY SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 1-WEEK FORWARD RATE. USUALLY 7, BUT CAN BE 6 OR 8.	NUMBER

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TDBIDFWD4	4-WEEK FORWARD BID RATE	DAILY SERIES OF 4-WEEK DAY-ADJUSTED FORWARD RATES BASED ON BID	RATIO
	TDASKFWD4	4-WEEK FORWARD ASK RATE	DAILY SERIES OF 4-WEEK DAY-ADJUSTED FORWARD RATES BASED ON ASK	RATIO
	TDAVEFWD4	4-WEEK FORWARD NOMPRC RATE	DAILY SERIES OF 4-WEEK DAY-ADJUSTED FORWARD RATES BASED ON NOMINAL PRICES (BID/ASK AVERAGE)	RATIO
	TDDURFWD4	DAYS USED FOR 4-WEEK FORWARD RATE	DAILY SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 4-WEEK FORWARD RATE. USUALLY 28, BUT CAN BE 27 OR 29.	NUMBER
	TDBIDHLD1	1-WEEK BID HOLDING RETURN	DAILY SERIES OF 1-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON BID	RATIO
	TDASKHLD1	1-WEEK ASK HOLDING RETURN	DAILY SERIES OF 1-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON ASK	RATIO
	TDAVEHLD1	1-WEEK NOMPRC HOLDING RETURN	DAILY SERIES OF 1-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON NOMINAL PRICES (BID/ASK AVERAGE)	RATIO
	TDDURHLD1	DAYS USED FOR 1-WEEK HOLDING RETURN	DAILY SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 1-WEEK HOLDING PERIOD RETURN. USUALLY 7, BUT CAN BE 6 OR 8.	NUMBER
	TDBIDHLD4	4-WEEK BID HOLDING RETURN	DAILY SERIES OF 4-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON BID	RATIO
	TDASKHLD4	4-WEEK ASK HOLDING RETURN	DAILY SERIES OF 4-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON ASK	RATIO
	TDAVEHLD4	4-WEEK NOMPRC HOLDING RETURN	DAILY SERIES OF 4-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON NOMINAL PRICES (BID/ASK AVERAGE)	RATIO
	TDDURHLD4	DAYS USED FOR 4-WEEK HOLDING RETURN	DAILY SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 4-WEEK HOLDING PERIOD RETURN. USUALLY 28, BUT CAN BE 27 OR 29.	NUMBER

#### TRZ\_MTH\_TS2.\* - MONTHLY 26-WEEK TERM STRUCTURE

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	SEE MAPPINGS BELOW	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE
	RMTREASNO	MONTHLY SERIES OF RELATED TREASNOS	MONTHLY SERIES OF REFERENCE TREASNOS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES  TREASNOX 2000064 (1-WEEK SERIES), 2000065 (2-WEEK) . . . 2000088 (25-WEEK), 2000089 (26-WEEK)	KEY
	RMTREASNO_FLG	REFERENCE TREASNO FLAG	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE TREASNO.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED	FLAG
	RMCRSPID	MONTHLY SERIES OF RELATED CRSPIDS	MONTHLY SERIES OF REFERENCE CRSPIDS WHICH IDENTIFY THE ISSUE USED FOR A SUPPLEMENTAL SERIES	ID



SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	RMCRSPID_FLG	REFERENCE CRSPID FLAG	VALUES IDENTIFY THE SELECTION PROCESS OF THE REPRESENTATIVE CRSPID.  A = SELECTED VIA ALGORITHM O = MANUAL OVERRIDE V = RESEARCHER VALIDATED	FLAG
	TMBID	MONTHLY BID	MONTHLY SERIES OF BIDS ON THE LAST QUOTATION DAY OF THE MONTH. TMBID IS SET TO ZERO FOR MISSING.	VAUE
	TMASK	MONTHLY ASK	MONTHLY SERIES OF ASKS ON THE LAST QUOTATION DAY OF THE MONTH. TMASK IS SET TO ZERO FOR MISSING.	VALUE
	TMNOMPRC	MONTHLY NOMINAL PRICE	VALUE USED IN CRSP CALCULATIONS, MOST OFTEN THE BID AND ASK AVERAGE. PRIOR TO 1960, BIDS AND SALES WERE USED, SEE TABLE BELOW	VALUE
	TMBIDYLD	MONTH-ADJUSTED BID YIELD	MONTHLY SERIES OF YIELD-TO-MATURITY BASED ON THE MONTHLY BID AMOUNT.	RATIO
	TMASKYLD	MONTH-ADJUSTED ASK YIELD	MONTHLY SERIES OF YIELD-TO-MATURITY BASED ON THE MONTHLY ASK AMOUNT	RATIO
	TMYLD	MONTHLY SERIES OF PROMISED DAILY YIELD	PROMISED YIELD DAILY RATE, ALSO CALLED DAILY YIELD-TO-MATURITY.  AT ANY DATE, THE PROMISED YIELD OF A SECURITY IS THE SINGLE INTEREST OR DISCOUNT RATE WHICH MAKES THE SUM OF THE PRESENT VALUES OF THE PRINCIPLE AT MATURITY AND FUTURE INTEREST PAYMENTS BE PRECISELY EQUAL TO THE FULL PRICE OF THE SECURITY. THE FULL PRICE IS THE NOMINAL PRICE, E.G., MEAN OF TMBID AND TMASK, PLUS THE ACCRUED INTEREST ON THE DATE IN QUESTION. IF A PRICE IS MISSING, THE <code>tmyld</code> FOR THAT MONTH IS SET TO -99.	RATIO
	TMDURATN	MONTHLY SERIES OF MACAULAY'S DURATION	FOR ALL ISSUES WITH ONLY A SINGLE PAYMENT AT MATURITY REMAINING, WHICH INCLUDES ALL BILLS, DURATION IS EQUAL TO THE DAYS TO MATURITY.	NUMBER
	TMBIDFWD1	1-WEEK FORWARD BID RATE	MONTH-END SERIES OF 1-WEEK DAY-ADJUSTED FORWARD RATES BASED ON BID	RATIO
	TMASKFWD1	1-WEEK FORWARD ASK RATE	MONTH-END SERIES OF 1-WEEK DAY-ADJUSTED FORWARD RATES BASED ON ASK	RATIO
	TMAVEFWD1	1-WEEK FORWARD NOMPRC RATE	MONTH-END SERIES OF 1-WEEK DAY-ADJUSTED FORWARD RATES BASED ON NOMINAL PRICES (BID/ASK AVERAGE)	RATIO
	TMDURFWD1	DAYS USED FOR 1-WEEK FORWARD RATE	MONTH-END SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 1-WEEK FORWARD RATE. USUALLY 7, BUT CAN BE 6 OR 8.	NUMBER
	TMBIDFWD4	4-WEEK FORWARD BID RATE	MONTH-END SERIES OF 4-WEEK DAY-ADJUSTED FORWARD RATES BASED ON BID	RATIO
	TMASKFWD4	4-WEEK FORWARD ASK RATE	MONTH-END SERIES OF 4-WEEK DAY-ADJUSTED FORWARD RATES BASED ON ASK	RATIO
	TMAVEFWD4	4-WEEK FORWARD NOMPRC RATE	MONTH-END SERIES OF 4-WEEK DAY-ADJUSTED FORWARD RATES BASED ON NOMINAL PRICES (BID/ASK AVERAGE).	RATIO
	TMDURFWD4	DAYS USED FOR 4-WEEK FORWARD RATE	MONTH-END SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 1-WEEK FORWARD RATE. USUALLY 28, BUT CAN BE 27 OR 29.	NUMBER

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TMBIDHLD1	1-WEEK BID HOLDING RETURN	MONTH-END SERIES OF 1-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON BID.	RATIO
	TMASKHLD1	MONTHLY 1-WEEK ASK HOLDING RETURN	MONTH-END SERIES OF 1-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON ASK.	RATIO
	TMAVEHLD1	1-WEEK NOMPRC HOLDING RETURN	MONTH-END SERIES OF 1-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON NOMINAL PRICES (BID/ASK AVERAGE).	RATIO
	TMDURHLD1	DAYS USED FOR 1-WEEK HOLDING RETURN	MONTH-END SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 1-WEEK HOLDING PERIOD RETURN. USUALLY 7, BUT CAN BE 6 OR 8.	NUMBER
	TMBIDHLD4	4-WEEK BID HOLDING RETURN	MONTH-END SERIES OF 4-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON BID.	RATIO
	TMASKHLD4	4-WEEK ASK HOLDING RETURN	MONTH-END SERIES OF 4-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON ASK.	RATIO
	TMAVEHLD4	4-WEEK NOMPRC HOLDING RETURN	MONTH-END SERIES OF 4-WEEK DAY-ADJUSTED HOLDING PERIOD RETURNS BASED ON NOMINAL PRICES (BID/ASK AVERAGE).	RATIO
	TMDURHLD4	DAYS USED FOR 4-WEEK HOLDING RETURN	MONTH-END SERIES OF THE NUMBER OF DAYS USED AS THE DENOMINATOR IN THE CALCULATION FOR THE 4-WEEK HOLDING PERIOD RETURN. USUALLY 28, BUT CAN BE 27 OR 29.	NUMBER
MAPPINGS		TREASNOX 2000064 (1-WEEK SERIES), 2000065 (2-WEEK) . . .2000088 (25-WEEK), 2000089 (26-WEEK)		

## CPI FILES

CPI data items are accessible through a new TREASNOX:

- 2000090 – Published and Reference CPI

Data items for CPI values are included Daily and Monthly Data Groups in SIFT, labeled Daily CPI and Monthly CPI. Items can be selected individually from the Data Items tree view, or collectively under the Data Groups tab.

### TFZ\_DLY\_CPI.\* - DAILY CPI

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	TREASURY RECORD IDENTIFIER	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	CALDT	QUOTATION DATE	DATE ASSOCIATED WITH THE QUOTATION	DATE
	TDCPIREF	REFERENCE CPI	DAILY TIME SERIES OF THE REFERENCE CPI AS DEFINED BY THE TREASURY IN CFR	AMOUNT
	TDCPIREF_FLG	REF CPI FLAG	DAILY REFERENCE CPI FLAG  S = SPOT-CHECK P = PRE-TIPS VALUES (CRSP-CALCULATED WITH CURRENT FORMULA, BUT PRE-DATING THE PUBLICATION OF REFERENCE CPI) V = VERIFIED	FLAG
	TDCPI	IMPUTED DAILY CPI – ALL CONSUMERS	CPI-U AS PUBLISHED BY THE US BUREAU OF LABOR STATISTICS	AMOUNT

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
	TDCPI_FLG	IMPUTED DAILY CPI – ALLCONSUMERS FLAG	DAILY CPI-U FLAG  M = MONTHLY PUBLISHED NUMBER W = WAITING P = ON PUBLICATION DATE B = BEFORE PUBLICATION DATE A = AFTER PUBLICATION DATE	FLAG
	TDCPIPUBDT	CPI-UPUBLICATION DATE	DATE THE CPI-U WAS PUBLISHED BY THE US BUREAU OF LABOR STATISTICS	DATE
	TDCPIPUBDT_FLG	CPI-U PUBLICATION DATEFLAG	CPI-U PUBLICATION DATE FLAG  B = BUREAU OF LABOR STATISTICS	FLAG

#### TFZ\_MTH\_CPI.\* - MONTHLY CPI

SORT	COLUMN NAME	DESCRIPTION	DEFINITION	DATA CATEGORY
1	(KY)TREASNOX	TREASURY RECORD IDENTIFIER	TREASNOX IS CRSP'S UNIQUE TREASURY ISSUE IDENTIFIER FOR SUPPLEMENTAL SERIES.	KEY
2	MCALDT	LAST QUOTATION DATE IN THE MONTH	MONTH-END DATE ASSOCIATED WITH THE QUOTATION	DATE
	TMCPREF	REFERENCE CPI	MONTHLY TIME SERIES OF THE REFERENCE CPI AS DEFINED BY THE TREASURY IN CFR	AMOUNT
	TMCPREF_FLG	REF CPI FLAG	MONTHLY REFERENCE CPI FLAG  S = SPOT-CHECK P = PRE-TIPS VALUES (CRSP-CALCULATED WITH CURRENT FORMULA, BUT PRE-DATING THE PUBLICATION OF REFERENCE CPI) V = VERIFIED	FLAG
	TMCP	IMPUTED DAILY CPI – ALL CONSUMERS	CPI-U AS PUBLISHED BY THE US BUREAU OF LABOR STATISTICS	AMOUNT
	TMCP_FLG	IMPUTED DAILY CPI – ALLCONSUMERS FLAG	MONTHLY CPI-U FLAG  M = MONTHLY PUBLISHED NUMBER W = WAITING P = ON PUBLICATION DATE B = BEFORE PUBLICATION DATE A = AFTER PUBLICATION DATE	FLAG
	TMCPUPBDT	CPI-UPUBLICATION DATE	DATE THE CPI-U WAS PUBLISHED BY THE US BUREAU OF LABOR STATISTICS	DATE
	TMCPUPBDT_FLG	CPI-U PUBLICATION DATEFLAG	CPI-U PUBLICATION DATE FLAG  B = BUREAU OF LABOR STATISTICS	FLAG

# Chapter 3: Reference Information

## LEGACY ITEM CROSS REFERENCE

The following table provides a cross-reference of item identifiers for CRSP treasury products.

TCATEGORY	NEW MNEMONIC (TRZ)	LEGACY DAILY (BD)	LEGACY DAILY FILE NAME	LEGACY MONTHLY (BM)	LEGACY MONTHLY FILE NAME	ITEM NAME
IDENTIFIERS						
	CRSPID	CRSPID	BMQUOTES, BXQUOTES, BMYIELD, BXYIELD	CRSPID	MBM DATA RECORD, MBX	CRSP-ASSIGNED UNIQUE ID
	RDCRSPID	CRSPID	BXDLYIND			DAILY SERIES OF RELATED CRSPIDS
	RDTREASNO	NEW	N/A			DAILY SERIES OF RELATED TREASNOS
	RMCRSPID			CRSPID	BXMTIND	MONTHLY SERIES OF RELATED CRSPIDS
	RMTREASNO			NEW	N/A	MONTHLY SERIES OF RELATED TREASNOS
	TNAME	NAME	BMHEADER	NAME	MBM -HEADER RECORD	NAME OF GOVERNMENT SECURITY
	TREASNO	NEW	N/A	NEW	N/A	TREASURY RECORD IDENTIFIER
DESCRIPTORS & EVENT DATA						
	IFCPDTF	FCPDTF	BMHEADER.DAT	NEW	MBM -HEADER RECORD	FIRST COUPON PAYMENT DATE FLAG
	IFLWR	FLOWER	BMHEADER.DAT	IFLWR	MBM -HEADER RECORD, MBX	PAYMENT OF ESTATE TAX CODE
	ITAX	TAX	BMHEADER.DAT	ITAX	MBM -HEADER RECORD, MBX	TAXABILITY OF INTEREST
	ITYPE	TYPE	BMHEADER.DAT	ITYPE	MBM -HEADER RECORD	TYPE OF ISSUE
	IUNIQ	UNIQ	BMHEADER.DAT	IUNIQ	MBM -HEADER RECORD	UNIQUENESS NUMBER
	IWHY	WHY	BMHEADER.DAT	IWHY	MBM -HEADER RECORD	REASON FOR END OF DATA
	IYMCN	YMCNOT	BMHEADER.DAT	IYMCN	MBM -HEADER RECORD	YEAR AND MONTH OF FIRST CALL NOTICE
	PDINT	PDINT	BMHEADER.DAT	PDINT(I)	MBM -HEADER RECORD	COUPON INTEREST PAYMENTS
	TBANKDT	BANKDT	BMHEADER.DAT	IDTBNK	MBM -HEADER RECORD	BANK ELIGIBILITY DATE AT TIME OF ISSUE
	TCOUPRT	COUPRT	BMHEADER.DAT	COUPRT	MBM -HEADER RECORD	COUPON RATE
	TCUSIP	CUSIP	BMHEADER.DAT	CUSIP	MBM -HEADER RECORD	TREASURY CUSIP
	TDATDT	DATDT	BMHEADER.DAT	IDTDTD	MBM -HEADER RECORD	DATE DATED BY TREASURY

TCATEGORY	NEW MNEMONIC (TRZ)	LEGACY DAILY (BD)	LEGACY DAILY FILE NAME	LEGACY MONTHLY (BM)	LEGACY MONTHLY FILE NAME	ITEM NAME
	TFCALDT	FCALDT	BMHEADER.DAT	IDTCP	MBM -HEADER RECORD	FIRST ELIGIBLE CALL DATE
	TFCPDT	FCPDT	BMHEADER.DAT	IDTFC	MBM -HEADER RECORD	FIRST COUPON PAYMENT DATE
	TMATDT	MATDT	BMHEADER.DAT	IDTMAT	MBM -HEADER RECORD	MATURITY DATE AT TIME OF ISSUE
	TMFSTDAT	QDATE(FSTQUO)	N/A	QDATE(MSTART)	MBM -HEADER RECORD	DATE OF FIRST MONTHLY DATA
	TMLSDAT	QDATE(LSTQUO)	N/A	QDATE(MFINIS)	MBM -HEADER RECORD	DATE OF LAST MONTHLY DATA
	TNIPPY	NIPPY	BMHEADER.DAT	NIPPY	MBM -HEADER RECORD	NUMBER OF INTEREST PAYMENTS PER YEAR
	TNOTICE	NOTICE	BMHEADER.DAT	NOTICE	MBM -HEADER RECORD	NOTICE REQUIRED ON CALLABLE ISSUES
	TPQDATE	PQDATE	BMPAYMNTS	NEW	N/A	INTEREST PAYMENT DATE
	TREASNOTYPE	NEW	N/A	NEW	N/A	TREASURY RECORD TYPE
	TVALFC	VALFC	BMHEADER.DAT	VALFC	MBM -HEADER RECORD	AMOUNT OF FIRST COUPON PER \$100 FACE VALUE
DAILY TIME SERIES ITEMS						
	TDACCINT	ACCINT	BMFIELD, BXYIELD			DAILY SERIES OF TOTAL ACCRUED INTEREST
	TDASK	ASK	BMQUOTES, BXQUOTES			DAILY ASK
	TDBID	BID	BMQUOTES, BXQUOTES			DAILY BID
	TDDURATN	DURATN	BMFIELD, BXYIELD			DAILY SERIES OF MACAULAY'S DURATION
	TDNOMPRC	NEW	N/A			DAILY NOMINAL PRICE
	TDNOMPRC_FLG	NEW	N/A			DAILY NOMINAL PRICE FLAG
	TDPDINT	PDINT	BMPAYMTS			DAILY SERIES OF PAID INTEREST
	TD PUBOUT	PUBOUT	BMDEBT			DAILY SERIES OF PUBLICLY HELD OUTSTANDING
	TDRATE	MULTIPLE	BXCALIND			DAILY PUBLISHED RATES
	TDRETADJ	RETADJ	BXDLYIND			DAILY ADJUSTED RETURN
	TDRETNUA	RETNUA	BMFIELD, BXYIELD			DAILY UNADJUSTED RETURN
	TDSOURCR	SOURCR	BMQUOTES, BXQUOTES			DAILY PRICE DATA SOURCE FLAG
	TDTOTOUT	TOTOUT	BMDEBT			DAILY SERIES OF TOTAL AMOUNT OUTSTANDING
	TDYLD	YLD	BMFIELD, BXYIELD			DAILY SERIES OF PROMISED DAILY YIELD
MONTHLY TIME SERIES ITEMS						
	TMACCINT			ACCINT	MBM DATA RECORD, MBX	MONTHLY SERIES OF TOTAL ACCRUED INTEREST

TCATEGORY	NEW MNEMONIC (TRZ)	LEGACY DAILY (BD)	LEGACY DAILY FILE NAME	LEGACY MONTHLY (BM)	LEGACY MONTHLY FILE NAME	ITEM NAME
	TMASK			PRIC2R	MBM DATA RECORD, MBX	MONTHLY ASK
	TMBID			PRIC1R(I)	MBM DATA RECORD, MBX	MONTHLY BID
	TMDURATN			DURATN(I)	MBM DATA RECORD, MBX	MONTHLY SERIES OF MACAULAY'S DURATION
	TMNOMPRC			NEW	N/A	MONTHLY NOMINAL PRICE
	TMNOMPRC_FLG			NEW	N/A	MONTHLY NOMINAL PRICE FLAG
	TMPCYLD			PCYLD	MBM DATA RECORD	MONTHLY SERIES OF SEMI-ANNUAL YIELD
	TMPDINT			PDINT	MBM DATA RECORD, MBX	INTEREST PAYABLE DURING MONTH
	TM PUBOUT			IOUT2R	MBM DATA RECORD, MBX	MONTHLY SERIES OF PUBLICLY HELD OUTSTANDING
	TMRETADJ			RETADJ	BXMTHIND	MONTHLY ADJUSTED RETURN
	TMRETNUA			RETNUA	MBM DATA RECORD, MBX	MONTHLY UNADJUSTED RETURN
	TMRETNXS			RETNXS	MBM DATA RECORD	MONTHLY EXCESS RETURN
	TMSOURCR			SOURCR	MBM DATA RECORD	MONTHLY PRICE DATA SOURCE
	TMTOTOUT			IOUT1R	MBM DATA RECORD, MBX	TOTAL AMOUNT OUTSTANDING
	TMYLD			YIELD	MBM DATA RECORD, MBX	MONTHLY SERIES OF PROMISED DAILY YIELD
	TMYTM			YTM	FAMABLSYLD.DAT	MONTHLY SERIES OF ANNUALIZED YIELD TO MATURITY
TREASNOX						
	TDYEARSTM	YEARSTM	BXDLYIND			DAILY SERIES OF YEARS TO MATURITY
	TDYTM	YTM	BXDLYIND			DAILY SERIES OF ANNUALIZED YIELD TO MATURITY
	TIDXFAM					TREASURY INDEX FAMILY
	TMASKFWD				FFWDASK6.DAT FFWDASK12.DAT	MONTH-ADJUSTED ASK FORWARD RATE
	TMASKRET				FHLDASK6.DAT FHLDASK12.DAT	MONTH-ADJUSTED ASK HOLD RETURN
	TMASKYLD				FYLDASK6.DAT FYLDASK12.DAT	MONTH-ADJUSTED ASK YIELD
	TMASKYTM				RISKFREE.DAT	MONTHLY SERIES OF ANNUALIZED YIELD TO MATURITY
	TMAVEFWD				FFWDAVE6.DAT FFWDAVE12.DAT	MONTH-ADJUSTED AVERAGE FORWARD RATE
	TMAVERET				FHLDAVE6.DAT FHLDAVE12.DAT	MONTH-ADJUSTED AVERAGE HOLD RETURN

TCATEGORY	NEW MNEMONIC (TRZ)	LEGACY DAILY (BD)	LEGACY DAILY FILE NAME	LEGACY MONTHLY (BM)	LEGACY MONTHLY FILE NAME	ITEM NAME
	TMAVEYLD				FYLDAVE6.DAT FYLDAVE12.DAT	MONTH-ADJUSTED AVERAGE YIELD
	TMBIDFWD				FFWDBID6.DAT FFWDBID12.DAT	MONTH-ADJUSTED BID FORWARD RATE
	TMBIDRET				FHLDBID6.DAT FHLDBID12.DAT	MONTH-ADJUSTED BID HOLD RETURN
	TMBIDYLD				FYLDBID6.DAT FYLDBID12.DAT	MONTH-ADJUSTED BID YIELD
	TMBIDYTM				RISKFREE.DAT	BID YIELD
	TMEWRETD				BONDPORT6.DAT BONDPORT12.DAT	MONTHLY EQUAL WEIGHTED PORTFOLIO RETURN
	TMYEARSTM			YEARSTM	BXMTHIND	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

## CRSPSIFT TREASNOX FILES

TREASNOX	TERM TYPE DESCRIPTION
INDEX FAMILY: RISKFREE - RISKFREE	
2000001	RISK-FREE RATES – 1 MONTH
2000002	RISK-FREE RATES – 3 MONTH
RISKFREE2	
2000061	RISK FREE 4-WEEK
2000062	RISK FREE 13-WEEK
2000063	RISK FREE 26-WEEK
INDEX FAMILY: FIXEDTERM - FIXED TERM	
2000003	1 YEAR BONDS, START DATE 1/31/1941
2000004	2 YEAR BONDS, START DATE 1/31/1941
2000005	5 YEAR BONDS, START DATE 4/30/1941
2000006	7 YEAR BONDS, START DATE 4/30/1941
2000007	10 YEAR BONDS, START DATE 5/31/1941
2000008	20 YEAR BONDS, START DATE 1/31/1942

TREASNOX	TERM TYPE DESCRIPTION
2000009	30 YEAR BONDS, START DATE 11/29/1941
<b>INDEX FAMILY: TERMSTRUCT - FAMA TERM STRUCTURE</b>	
2000010	FAMA 12 MONTH T-BILLS – 1 MONTH
2000011	FAMA 12 MONTH T-BILLS – 2 MONTH
2000012	FAMA 12 MONTH T-BILLS – 3 MONTH
2000013	FAMA 12 MONTH T-BILLS – 4 MONTH
2000014	FAMA 12 MONTH T-BILLS – 5 MONTH
2000015	FAMA 12 MONTH T-BILLS – 6 MONTH
2000016	FAMA 12 MONTH T-BILLS – 7 MONTH
2000017	FAMA 12 MONTH T-BILLS – 8 MONTH
2000018	FAMA 12 MONTH T-BILLS – 9 MONTH
2000019	FAMA 12 MONTH T-BILLS – 10 MONTH
2000020	FAMA 12 MONTH T-BILLS – 11 MONTH
2000021	FAMA 12 MONTH T-BILLS – 12 MONTH
2000022	FAMA 6 MONTH T-BILLS – 1 MONTH
2000023	FAMA 6 MONTH T-BILLS – 2 MONTH
2000024	FAMA 6 MONTH T-BILLS – 3 MONTH
2000025	FAMA 6 MONTH T-BILLS – 4 MONTH
2000026	FAMA 6 MONTH T-BILLS – 5 MONTH
2000027	FAMA 6 MONTH T-BILLS – 6 MONTH
<b>INDEX FAMILY: BONDMAPORT - FAMA BOND PORTFOLIO RETURN</b>	
2000028	FAMA BONDPORT RETURN – 6MO RANGE <=6MONTH
2000029	FAMA BONDPORT RETURN -6MO RANGE <=12MONTH
2000030	FAMA BONDPORT RETURN -6MO RANGE <=18MONTH
2000031	FAMA BONDPORT RETURN -6MO RANGE <=24MONTH
2000032	FAMA BONDPORT RETURN -6MO RANGE <=30MONTH
2000033	FAMA BONDPORT RETURN -6MO RANGE <=36MONTH
2000034	FAMA BONDPORT RETURN -6MO RANGE <=42MONTH
2000035	FAMA BONDPORT RETURN -6MO RANGE <=48MONTH
2000036	FAMA BONDPORT RETURN -6MO RANGE <=54MONTH
2000037	FAMA BONDPORT RETURN -6MO RANGE <=60MONTH
2000038	FAMA BONDPORT RETURN > 60 <= 120 MONTH
2000039	FAMA BONDPORT RETURN > 120 MONTH
2000040	FAMA BONDPORT RETURN -12MO RANGE <=12MONTH
2000041	FAMA BONDPORT RETURN -12MO RANGE <=24MONTH
2000042	FAMA BONDPORT RETURN -12MO RANGE <= 36MONTH
2000043	FAMA BONDPORT RETURN -12MO RANGE <= 48MONTH
2000044	FAMA BONDPORT RETURN -12MO RANGE <= 60MONTH
2000045	RESERVED FOR FUTURE USE – DUPLICATE OF 2000038
2000046	RESERVED FOR FUTURE USE – DUPLICATE OF 2000039
<b>INDEX FAMILY: DISCBOND - FAMA-BLISS DISCOUNT BONDS</b>	
2000047	FAMA BILSS DISCOUNT BONDS 1 YEAR
2000048	FAMA BILSS DISCOUNT BONDS 2 YEAR
2000049	FAMA BILSS DISCOUNT BONDS 3 YEAR
2000050	FAMA BILSS DISCOUNT BONDS 4 YEAR
2000051	FAMA BILSS DISCOUNT BONDS 5 YEAR



TREASNOX	TERM TYPE DESCRIPTION
<b>INDEX FAMILY: RATES - RATES</b>	
2000052	1-MONTH CERTIFICATE OF DEPOSIT RATE
2000053	3-MONTH CERTIFICATE OF DEPOSIT RATE
2000054	6-MONTH CERTIFICATE OF DEPOSIT RATE
2000055	30-DAY COMMERCIAL PAPER RATE
2000056	60-DAY COMMERCIAL PAPER RATE
2000057	90-DAY COMMERCIAL PAPER RATE
2000058	FEDERAL FUNDS EFFECTIVE RATE
2000059	FEDERAL FUNDS MINIMUM TRADING RANGE
2000060	FEDERAL FUNDS MAXIMUM TRADING RANGE
<b>INDEX FAMILY: TERMSTRUCT - 26-WEEK DAILY/MONTHLY TERM STRUCTURE</b>	
2000064	FAMA T-BILL 26-WEEK TERM STRUCTURE - 1 WEEK
2000065	FAMA T-BILL 26-WEEK TERM STRUCTURE - 2 WEEK
2000066	FAMA T-BILL 26-WEEK TERM STRUCTURE - 3 WEEK
2000067	FAMA T-BILL 26-WEEK TERM STRUCTURE - 4 WEEK
2000068	FAMA T-BILL 26-WEEK TERM STRUCTURE - 5 WEEK
2000069	FAMA T-BILL 26-WEEK TERM STRUCTURE - 6 WEEK
2000070	FAMA T-BILL 26-WEEK TERM STRUCTURE - 7 WEEK
2000071	FAMA T-BILL 26-WEEK TERM STRUCTURE - 8 WEEK
2000072	FAMA T-BILL 26-WEEK TERM STRUCTURE - 9 WEEK
2000073	FAMA T-BILL 26-WEEK TERM STRUCTURE - 10 WEEK
2000074	FAMA T-BILL 26-WEEK TERM STRUCTURE - 11 WEEK
2000075	FAMA T-BILL 26-WEEK TERM STRUCTURE - 12 WEEK
2000076	FAMA T-BILL 26-WEEK TERM STRUCTURE - 13 WEEK
2000077	FAMA T-BILL 26-WEEK TERM STRUCTURE - 14 WEEK
2000078	FAMA T-BILL 26-WEEK TERM STRUCTURE - 15 WEEK
2000079	FAMA T-BILL 26-WEEK TERM STRUCTURE - 16 WEEK
2000080	FAMA T-BILL 26-WEEK TERM STRUCTURE - 17 WEEK
2000081	FAMA T-BILL 26-WEEK TERM STRUCTURE - 18 WEEK
2000082	FAMA T-BILL 26-WEEK TERM STRUCTURE - 19 WEEK
2000083	FAMA T-BILL 26-WEEK TERM STRUCTURE - 20 WEEK
2000084	FAMA T-BILL 26-WEEK TERM STRUCTURE - 21 WEEK
2000085	FAMA T-BILL 26-WEEK TERM STRUCTURE - 22 WEEK
2000086	FAMA T-BILL 26-WEEK TERM STRUCTURE - 23 WEEK
2000087	FAMA T-BILL 26-WEEK TERM STRUCTURE - 24 WEEK
2000088	FAMA T-BILL 26-WEEK TERM STRUCTURE - 25 WEEK
2000089	FAMA T-BILL 26-WEEK TERM STRUCTURE - 26 WEEK
<b>INDEX FAMILY: CPI DATA</b>	
2000090	PUBLISHED AND REFERENCE CPI

# Appendix A: Special Issues

## ISSUES WITH SPECIAL PROVISIONS

The following is a list of issues having special provisions and coded with `ITYPE = 9`. You may wish to consider these provisions before using the data from these issues.

19330315.902000	Redeemable at option of holder at par plus accrued interest with 60 days notice. Principal and interest payable in United States gold coin.
19340415.904250	Issue created by early call of 19381015.904250. Similar numbers selected to be called for redemption on 19340415 were promulgated by the Treasury effectively creating a new issue which was quoted separately up to the call date.
19341015.904250	Issue created by early call of 19381015.904250. Similar to 19340415.904250.
19350415.904250	Issue related by early call of 19381015.904250. Similar to 19340415.904250.
19381015.904250	Principal and interest payable in United States gold coin.
19451015.903250	Accrued interest at the rate of 41/4% up to 19341015 and at 31/4% thereafter.
19590801.904000	Issue created from 19610801.904000 (see below).
19600215.904000	Issue created from 19620815.904000 (see below).
19610801.904000	Redeemable at the option of the holder at par and accrued interest on August 1, 1959. Notice of intent to redeem must be made by May 1, 1959 and certificates to be redeemed to be stamped. Once stamped, certificates mature on August 1, 1959 (not August 1, 1961 as issued). These stamped certificates were traded and quoted under the new CRSPID, even though no such security was actually issued by the treasury.
19620815.904000	Similar to 19610801.904000. Redeemable at option of holder on February 15, 1960, written notice and surrender required on or before November 16, 1959. Issue thus created was 19600215.904000.
99990401.902000	Consol bond, paid interest quarterly in perpetuity. Principal returned only if called. Issue actually called in 1935.

These issues are also traded as normal notes and bonds and are quoted as such in the files.

## STRIPPED NOTES AND BONDS

Stripped notes and bonds are issues, which have been broken into their component cash flows, each of which is then traded separately. This was originally done by various financial institutions who issued treasury backed securities (e.g., CATS, TIGERS etc.). A fully-constituted Treasury note or bond consists of a principal payment and semiannual interest payments. In 1985 the treasury began participating in this market by designating certain issues as eligible to be stripped. All 10 year notes and all bonds issued since November 15, 1984 have been made eligible for the STRIPS program either upon their original issue or after their first interest payment date. Issues so designated could be broken up and the individual cash flows registered separately. **As of September 1999, all new Treasury marketable fixed-rate notes and bonds issued on and after September 30, 1997 are eligible for STRIPS.** The Treasury itself did not sell the individual payments, this being done by dealers who first purchased eligible securities.

The following issues have been designated as eligible for stripping by the Treasury:

19941115.211620	20000815.208750	20050815.206500	20200815.108750
19950215.211250	20001115.205750	20051115.205870	20210215.107870
19950515.211250	20001115.208500	20060215.109370	20210515.108120
19950815.210500	20010215.207750	20060515.206870	20210815.108120
19951115.209500	20010515.208000	20060715.207000	20211115.108000

19960215.208870	20010815.207870	20061015.206500	20220815.107250
19960515.207370	20011115.207500	20060215.205620	20221115.107620
19961115.207250	20011115.208500	20070215.206250	20230215.107120
19970515.208500	20020515.207500	20070515.206620	20230815.106250
19970815.208620	20020815.206370	20070815.206120	20241115.107500
19971115.208870	20020930.205870	20141115.511750	20250215.107620
19980215.208120	20021031.205750	20150215.111250	20250815.106870
19980515.209000	20021130.205750	20150815.110620	20260215.106000
19980815.209250	20021231.205620	20151115.109870	20260815.106750
19981115.208870	20030215.206250	20160215.109250	20261115.106500
19990215.208870	20030815.205750	20160515.107250	20270215.106620
19990515.209120	20040215.205870	20161115.107500	20270815.106370
19990815.208000	20040515.207250	20170515.108750	20271115.106120
19990930.205750	20040815.207250	20170815.108870	20280815.105500
19991031.205620	20041115.111620	20180515.109120	20281115.105250
19991115.207870	20041115.207870	20181115.109000	20290215.105250
19991130.205620	20050215.207500	20190215.108870	20290815.106120
19991231.205620	20050515.112000	20190815.108120	
20000215.208500	20050515.206500	20200215.108500	
20000515.208870	20050815.110750	20200515.108750	

## FOREIGN TARGETED SECURITIES

Foreign targeted issues are not included in the CRSP US Treasury Database. Certain recent notes have been issued in pairs with identical coupon rates, maturities and dated dates. One issue of the pair is intended for domestic holders and is normal in all respects. The other issue is intended for United States aliens. These “Foreign Targeted Securities” are exempt from certain federal taxes when held by eligible foreigners. They pay interest annually and may be converted into their domestic equivalent or sale to domestic holders. The converse is not true.

The following notes which are included are known to have Foreign Targeted equivalents:

19880930.211370	dated 19841031
19900215.211000	dated 19841203
19900815.209870	dated 19850604
19960215.208870	dated 19860215