CRSP ZIMAN/REAL ESTATE DATA SERIES RELEASE NOTES

SEPTEMBER 2017 MONTHLY/QUARTERLY UPDATE

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through September 2017, available in October 2017.
- The data series contains 641 securities of which 224 are currently trading. The date range is from 19800102-20170929.
- This release may be installed on Windows and Linux. ASCII and SAS versions of the data series are available for all three platforms and in addition, a Microsoft Access database is available for Windows. The Zip files available for download include a version for each different set of files, found in the table in the zip file structure section below.

RESEARCH AND PROGRAMMING NOTES

Prices and indexes in this product begin in January of 1980. This is true even when the Ziman REIT Info table states that the REIT was in existence prior to 1980.

The base year for the CRSP/Ziman Indexes is 12/30/1994, at which point they are set to a value of 100. This differs from CRSP Market Indexes which are set to 100 on 12/29/1972.

Due to some inconsistent trading early in the time series, a few additional rules were implemented to improve the continuity of the portfolios used to calculate the indexes. Please refer to Chapter 2 of the CRSP/Ziman Real Estate Data Series Guide for an explanation of universe and price selection criteria.

201709 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
16936	TREMONT MORTGAGE TRUST	TRMT	89478910	9/14/2017	9/29/2017
DELISTS					
15044	MONOGRAM RESIDENTIAL TRUST INC	MORE	60979P10	11/21/2014	9/19/2017
92331	DUPONT FABROS TECHNOLOGY INC	DFT	26613Q10	10/19/2007	09/13/2017
80747	FELCOR LODGING TRUST INC	FCH	31430F10	7/22/1994	8/31/2017

201708 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
DELISTS					
15598	CARE CAPITAL PROPERTIES INC	CCP	14162410	8/18/2015	8/16/2017

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13700	HEELER REAL ESTATE INV TR INC	had a shares change from 8616 to 8667 on 20170630-20170806
13752	CYRUSONE INC	had a shares change from 87726 to 91291 on 20170630-20170730 and from 87726 to 91292 for 20170731-present
14651	CARETRUST REIT INC	had a shares change from 72551 to 75467 on 20170630-20170731.
15279	UNITI GROUP INC	had a shares change from 175448 to 174813 on 20170630-20170727 and from 175448 to 175449 on 20170728-present.
80014	C I M COMMERCIAL TRUST CORP	had a shares change from 84048 to 57876 on 20170630-present.
81917	HOSPITALITY PROPERTIES TRUST	had a shares change from 164268 to 164283 on 20170630-present.
83879	LAMAR ADVERTISING CO NEW	had a shares change from 83491 to 83614 on 20170630-present.
86996	S B A COMMUNICATIONS CORP NEW	had a shares change from 121301 to 120981 on 20170630-20170725 and from 121301 to 120358 on 20170726-present.
87289	SENIOR HOUSING PROPERTIES TRUST	had a shares change from 237544 to 237559 on 20170630-present.
89617	EQUINIX INC	had a shares change from 77912 to 77945 on 20170630-present.
89823	GLADSTONE COMMERCIAL CORP	had a shares change from 25195 to 27642 on 20170731-present.
90092	SABRA HEALTHCARE REIT INC	had a shares change from 65411 to 65425 on 20170630-20170725 and from 65411 to 65438 on 20170726-present.
90214	NEW YORK MORTGAGE TRUST INC	had a shares change from 111843 to 111891 on 20170630-present.
90506	SOTHERLY HOTELS INC	had a shares change from 13798 to 13815 on 20170630-present.
92680	A G N C INVESTMENT CORP	had a shares change from 355546 to 355600 on 20170630-20170730 and from 355546 to 355551 on 20170731-present.
92948	GOVERNMENT PROPERTIES INCOME TR	had a shares change from 71178 to 71195 on 20170630-20170704.

201707 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
16813	T P G RE FINANCE TRUST INC	TRTX	87266M10	7/20/2017	7/31/2017
16809	J B G SMITH PROPERTIES	JBGS	46590V10	7/18/2017	7/31/2017

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13309	SELECT INCOME REIT	had a shares change from 89428 to 89443 for 20170630-present
14252	GAMING & LEISURE PROPERTIES INC	had a shares change from 208137 to 208200 on 20170501-20170629 and from 208137 to 212218 for 20170630-present
49744	POTLATCH CORP NEW	had a shares change from 40609 to 40611 on 20170630 to present
89823	GLADSTONE COMMERCIAL CORP	had a shares change from 25195 to 25755 on 20170630 to present

DELIVERY METHOD, INSTALLS, AND DATA FORMATS

DELIVERY

CRSP data delivery for all products is available through the "Cloud." By utilizing IPSwitch's MOVEit Cloud product (https://crsp.moveitcloud.com, you can download data products either on demand, or with scheduled processes.

ZIP INSTALLS

CRSP uses a zip process for data installation. ZIP utilities that are standard on all platforms should work to unzip the databases. On Windows computers, CRSP recommends using 7-ZIP, which can be downloaded from this site: http://www.7-zip.org/

Several important items to note:

- All directories are extracted to lower case letters. For example: C:\crspdata\raz201308
- All Windows Users: Extracting a zipped file does not create an installed program in Windows. It will not show in the Windows Control Panel. When uninstalling the data, just delete the directories that contain the detailed files

Red Hat Linux Users: If your version of Red Hat is earlier than 6.0, you will need to install an updated version of the "File Roller" program in order to install the data.

ZIP FILE STRUCTURE AND PROCESS:

Three separate zip files need to be unzipped separately. Unzip the files into the root or home or your target directory. For example, c:\ in Windows; /home for Linux. The unzip process will created the \crspdata subdirectory.

Note that the destination directories have also changed as part of this process:

Zip file on disk	Description	Install Path
razyyyymm_ascii	ASCII files	\crspdata\razyyyymm_ascii
razyyyymm_msaccess	MS Access tables	\crspdata\razyyyymm_msaccess
razyyyymm_sas	SAS files	\crspdata\razyyyymm_sas

Contact CRSP Client Services for assistance at support@crsp.chicagobooth.edu or call 312-263-6400, Option 2.

SYSTEM REQUIREMENTS

- SAS version 8 or higher, Microsoft Access, or an analytical tool of your choice
- Sufficient disk space to load and manipulate the data series.*

Data Series Format	Monthly Data Series	Daily/Monthly Data Series
ASCII	12.2 MB	260 MB
Microsoft Access	11.9 MB	224 MB
SAS V 9.1	13.9 MB	277 MB

*Additional disk space will be needed for data manipulation.

FILE NAME SPECIFICATIONS AND INSTALLATION

ASCII

All files contain variable-width records, ending with line-feeds, with pipe-delimited "l" fields. There are no header records. See Table Definitions in Chapter 3 of the guide for field order in each file.

File Name	Description
crsp_daily_data.txt*	daily REIT security data
crsp_header.txt	security REIT header data
crsp_monthly_data.txt	monthly REIT security data
crsp_names.txt	security name history of REITS
crsp_ziman_daily_index.txt*	daily index results
crsp_ziman_monthly_index.txt	monthly index results
index_type_map.txt	definitions of REIT indexes and characteristics
price_type.txt	definitions of available price types
Property_type.txt	definitions of available REIT property types

File Name	Description
reit_type.txt	definitions of available REIT categories
sub_property_type.txt	definitions of available REIT property subtypes
ziman_reit_info.txt	REIT information

SAS

Column names and labels are embedded in the data sets. The full descriptions for fields can be found in the table definitions section of Chapter 3 of the guide.

File Name	Description
crsp_daily_data.sas7bdat* crsp_daily_data.sas7bndx*	daily REIT security data and index
crsp_header.sas7bdat crsp_header.sas7bndx	security REIT header data and index
crsp_monthly_data.sas7bdat crsp_monthly_data.sas7bndx	monthly REIT security data and index
crsp_names.sas7bdat crsp_names.sas7bndx	security name history of REITS and index
crsp_ziman_daily_index.sas7bdat* crsp_ziman_daily_index.sas7bndx*	daily index results and index
crsp_ziman_monthly_index.sas7bdat crsp_ziman_monthly_index.sas7bndx	monthly index results and index
index_type_map.sas7bdat	definitions of REIT indexes and characteristics
price_type.sas7bdat	definitions of available price types
Property_type.sas7bdat	definitions of available REIT property types
reit_type.sas7bdat	definitions of available REIT categories
sub_property_type.sas7bdat	definitions of available REIT property subtypes
ziman_reit_info.sas7bdat ziman_reit_info.sas7bndx	REIT information and index

MSACCESS

A Microsoft Access database is provided named `reit_db.mdb` containing all data tables. The database is in Access 2000 file format. The design view menu within Access can be used to view available fields, data types, and descriptions.