CRSP ZIMAN/REAL ESTATE DATA SERIES RELEASE NOTES

MARCH 2018 MONTHLY/QUARTERLY UPDATE

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through March 2018, available in April 2018.
- The data series contains 645 securities of which 225 are currently trading. The date range is from 19800102-20180329.
- 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.

201803 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
HISTORICA	L CHANGES				
89878	FIRST POTOMAC REALTY TRUST	FP0	33610F10	10/23/2003	09/29/2017

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13752	CYRUSONE INC	had a shares change from 96138 to 96126 on 20180228-present.
15279	UNITI GROUP INC	had a shares change from 175463 to 174852 on 20171229-present.
13700	WHEELER REAL ESTATE INV TR INC	had a shares change from 8731 to 8744 on 20171229-present.
86996	S B A COMMUNICATIONS CORP NEW	had a shares change from 117543 to 116446 on 20171229-present.
90214	NEW YORK MORTGAGE TRUST INC	had a shares change from 111854 to 111910 on 20170929-20180226 and 111910 to 112117 on 20180227-present.
90506	SOTHERLY HOTELS INC	had a shares change from 13823 to 14079 on 20171229-present.
92343	RETAIL OPPORTUNITY INVST CORP	had a shares change from 112347 to 112420 on 20180228-present.
89617	EQUINIX INC	had a shares change from 79038 to 79228 on 20170228-present.
89823	GLADSTONE COMMERCIAL CORP	had a shares change from 28384 to 28420 on 20180228-present.
92680	A G N C INVESTMENT CORP	had a shares change from 391300 to 391317 on 20180131-present.
89823	GLADSTONE COMMERCIAL CORP	had a shares change from 27706 to 28384 on 20171229-present.
90092	SABRA HEALTHCARE REIT INC	had a shares change from 178232 to 178256 on 20171229-present.
92680	A G N C INVESTMENT CORP	had a shares change from 391296 to 391300 on 2017129-present.

201802 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS	ADDS				
17287	COLONY NORTHSTAR CREDIT RE INC	CLNC	19626A10	2/1/2018	2/28/2018
17307	VICI PROPERTIES INC	VICI	92565210	2/1/2018	2/28/2018

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13752	CYRUSONE INC	had a shares change from 91309 to 96138 on 20171229-present.
13756	GLADSTONE LAND CORP	had a shares change from 13638 to 13792 on 20171229-present.
14252	GAMING & LEISURE PROPERTIES INC	had a shares change from 212603 to 212718 on 20171229-present.
14651	CARETRUST REIT INC	had a shares change from 75923 to 75478 on 20171229-present.
49744	POTLATCHDELTIC CORP	had a share changes from 40611 to 40612 on 20171229-present.
16936	TREMONT MORTGAGE TRUST	had a shares change from 3100 to 3126 on 20171229 to present.
83879	LAMAR ADVERTISING CO NEW	had a shares change from 84012 to 83838 on 20171229-present.
92343	RETAIL OPPORTUNITY INVST CORP	had a shares change from 109730 to 112347 on 20171229-present.
89878	FIRST POTOMAC REALTY TRUST	had a ptype change from 12 to 13 on 20180131.
89617	EQUINIX INC	had a shares change from 78234 to 79038 on 20170929-present.
89823	GLADSTONE COMMERCIAL CORP	had a shares change from 27706 to 28384 on 20171229-present.
90092	SABRA HEALTHCARE REIT INC	had a shares change from 178232 to 178256 on 20171229-present.
92680	A G N C INVESTMENT CORP	had a shares change from 391296 to 391300 on 2017129-present.

201801 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
17226	AMERICOLD REALTY TRUST	COLD	03064D10	1/19/2018	1/31/2018
17222	INDUSTRIAL LOGISTICS PPTYS TR	ILPT	45623710	1/12/2018	1/31/2018

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
80014	C I M COMMERCIAL TRUST CORP	had a shares change from 57876 to 43785 on 20171229-present
80014	FIRST POTOMAC REALTY TRUST	had a price change from 11.150 to 0 on 20171229

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	12.4 MB	264 MB
Microsoft Access	12.1 MB	227 MB
SAS V 9.1	14.1 MB	281 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 "I" 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
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*	daily REIT security data and index
crsp_daily_data.sas7bndx*	
crsp_header.sas7bdat	security REIT header data and index
crsp_header.sas7bndx	
crsp_monthly_data.sas7bdat	monthly REIT security data and index
crsp_monthly_data.sas7bndx	
crsp_names.sas7bdat	security name history of REITS and index
crsp_names.sas7bndx	Security name instory of KEITS and muck
crsp_ziman_daily_index.sas7bdat*	daily index results and index
crsp_ziman_daily_index.sas7bndx*	
crsp_ziman_monthly_index.sas7bdat	monthly index results and index
crsp_ziman_monthly_index.sas7bndx	
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	RFIT information and index
ziman_reit_info.sas7bndx	

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.