

CRSP ZIMAN/REAL ESTATE DATA SERIES RELEASE NOTES

MARCH 2017 MONTHLY/QUARTERLY UPDATE

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through March 2017, available in April 2017.
- The data series contains 638 securities of which 224 are currently trading. The date range is from 19800102-20170331.
- This release that may be installed on three platforms: Windows, Linux, and Sun. 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.

201703 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
DELISTS					
86013	EQUITY ONE INC	EQY	29475210	5/14/1998	3/1/2017
HISTORICAL CHANGES					
OLD					
82217	SUNSTONE HOTEL INVESTORS INC	SSHI	86793310	8/15/1995	11/22/1999
75819	VENTAS INC	VTR	92276F10	9/19/1989	2/28/2017
NEW					
82217	SUNSTONE HOTEL INVESTORS INC	SSI	86793310	8/11/1995	11/22/1999
75819	VENTAS INC	VTR	92276F10	5/1/1998	3/31/2017

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13700	WHEELER REAL ESTATE INV TR INC	had a shares change from 67965 to 68172 on 20161230 to 20170228.
13752	CYRUSONE INC	had a shares change from 83536 to 87862 on 20170228.
15279	UNITI GROUP INC	had a shares change from 155139 to 155786 on 20170228.
16266	REVEN HOUSING REIT INC	had a shares change from 10552 to 10734 on 20161230 to 20170228.
81917	HOSPITALITY PROPERTIES TRUST	had a shares change from 164269 to 164268 on 20161230 to 20170228.

PERMNO	COMPANY NAME	DESCRIPTION
83879	LAMAR ADVERTISING CO NEW	had a shares change from 82823 to 82824 on 20170228.
86996	S B A COMMUNICATIONS CORP NEW	had a shares change from 124073 to 120977 on 20170131 to 20170228.
89617	EQUINIX INC	had a shares change from 71409 to 71637 on 20170228.
89617	EQUINIX INC	had a shares change from 71379 to 71409 on 20161230 to 20170131.
90214	NEW YORK MORTGAGE TRUST INC	had a shares change from 109569 to 111475 on 20161230 to 20170228.
90506	SOTHERLY HOTELS INC	had a shares change from 14950 to 14469 on 20161230 to 20170228.
92343	RETAIL OPPORTUNITY INVST CORP	had a shares change from 109302 to 109726 on 20161230 to 20170228.
92680	A G N C INVESTMETS CORP	had a shares change from 331000 to 331046 on 20161230 to 20170228.

ZIMAN REIT INFO CHANGES

There was a historical change for PERMNO 14686 (COLONY NORTHSTAR INC) from 1/11/2016 to 2/28/2016.

INDICES DIFFS

(any change over 5% for 1000800 and 1000850, except new adds and drops, or any suspicious change in returns, usdval or usdcnt for any indno)

Daily

INDNO 1000850 & 1000800 had an absolute percentage change of 1000% addcnts on 19950814 due to PERMNO 82217, which began trading as a REIT on 19950811.

INDNO 1000850 & 1000800 had an absolute percentage change of 1000% addcnts on 19980504 due to PERMNO 75819, which began trading as a REIT on 19980501.

INDNO 1000850 & 1000800 had an absolute percentage change of 1000% addcnts on 19890920 due to PERMNO 75819, which began trading as a REIT on 19890919.

INDNO 1000850 & 1000800 had an absolute percentage change of 1000% addcnts on 19950816 due to PERMNO 82217, which began trading as a REIT on 19950815.

201702 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
16577	CLIPPER REALTY INC	CLPR	18885T30	2/10/2017	2/28/2017
16581	INVITATION HOMES INC	INVH	46187W10	2/1/2017	2/28/2017
16585	SACHEM CAPITAL CORP	SACH	78590A10	2/10/2017	2/28/2017
DELISTS					
15711	AMERICAN FARMLAND COMPANY	AFCO	02589Y10	10/20/2015	2/1/2017
HISTORICAL CHANGES					
14686	COLONY NORTHSTAR INC	CLNS	19625W10	1/11/2017	2/28/2017

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13309	SELECT INCOME REIT	had a shares change from 89429 to 89428 on 20161230 to 20170131.
13752	CYRUSONE INC	had a shares change from 83525 to 83536 on 20161230 to 20170131.
14252	GAMING & LEISURE PROPERTIES INC	had a shares change from 207127 to 207677 on 20161230 to 20170131.
14651	CARETRUST REIT INC	had a shares change from 58079 to 64816 on 20161230 to 20170131.

PERMNO	COMPANY NAME	DESCRIPTION
15279	UNITI GROUP INC	had a shares change from 155790 to 155139 on 20161230 to 20170131.
49744	POTLATCH CORP NEW	had a shares change from 40519 to 40547 on 20161230 to 20170131.
83879	LAMAR ADVERTISING CO NEW	had a shares change from 82712 to 82823 on 20161230 to 20170131.
87289	SENIOR HOUSING PROPERTIES TRUST	had a shares change from 237546 to 237544 on 20161230 to 20170131.
89617	EQUINIX INC	had a shares change from 71379 to 71409 on 20161230 to 20170131.
89823	GLADSTONE COMMERCIAL CORP	had a shares change from 23748 to 24883 on 20161230 to 20170131.
90092	SABRA HEALTHCARE REIT INC	had a shares change from 65260 to 65286 on 20161230 to 20170131.
92343	RETAIL OPPORTUNITY INVST CORP	had a shares change from 109298 to 109302 on 20161230 to 20170131.
92680	A G N C INVESMETS CORP	had a shares change from 331046 to 331000 on 20161230 to 20170131.
92948	GOVERNMENT PROPERTIES INCOME TR	had a shares change from 71179 to 71178 on 20161230 to 20170131.

ZIMAN REIT INFO CHANGES

There was a historical change for PERMNO 14686 (COLONY NORTHSTAR INC) from 1/11/2016 to 2/28/2016.

INDICES DIFFS

(any change over 5% for 1000800 and 1000850, except new adds and drops, or any suspicious change in returns, usdval or usdcnt for any indno)

Daily

INDNO 1000850 & 1000800 had an absolute percentage change of 1000% addcnts on 20170118 due to PERMNO 14686, which began trading as a REIT on 20170117.

201701 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

PERMNO	COMPANY NAME	TICKER	CUSIP	START DATE	END DATE
ADDS					
86996	S B A COMMUNICATIONS CORP NEW	SBAC	78410G10	1/17/2017	1/31/2017
DELISTS					
90388	NORTHSTAR REALTY FINANCE CORP	NRF	66704R80	10/26/2004	1/10/2017
93018	COLONY CAPITAL INC	CLNY	19624R10	9/24/2009	1/10/2017

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 and Solaris. The unzip process will create the \crspdata subdirectory.

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

Zip file on disk	Description	Install Path
razyyyyymm_ascii	ASCII files	\crspdata\razyyyyymm_ascii
razyyyyymm_msaccess	MS Access tables	\crspdata\razyyyyymm_msaccess
razyyyyymm_sas	SAS files	\crspdata\razyyyyymm_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	12.0 MB	256 MB
Microsoft Access	11.7 MB	220 MB
SAS V 9.1	13.6 MB	272 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 “|” 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* 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.