CRSP ZIMAN/REAL ESTATE DATA SERIES RELEASE NOTES

MARCH 2016 MONTHLY/QUARTERLY UPDATE

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through March 2016, shipped in April 2016.

- The data series contains 622 securities of which 225 are currently trading. The date range is from 19800102-20160331.

- 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.

201603 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

Permno	Company Name	Ticker	Cusip	Start Date	End Date
DELISTS					
12323	CAMPUS CREST COMMUNITIES INC	CCG	13466Y10	10/14/2010	3/2/2016
13886	AMERICAN RESIDENTIAL PPTYS INC	ARPI	02927E30	5/9/2013	2/29/2016
90208	INLAND REAL ESTATE CORP	IRC	45746120	6/9/2004	3/30/2016

PERMNO	COMPANY NAME	DESCRIPTION
CHANGES		
13700	WHEELER REAL ESTATE INV TR INC	had a shares outstanding change to 66260 from 66161 from 20160129-20160229.
13752	CYRUSONE INC	had a shares outstanding change to 72271 from 72593 from 20160129-20160229.
80014	C I M COMMERCIAL TRUST CORP	had a shares outstanding change to 97482 from 97590 from 20160129-20160229.
81087	CONDOR HOSPITALITY TRUST INC	had a shares outstanding change to 4942 from 4937 from 20160129-20160229.
83879	LAMAR ADVERTISING CO NEW	had a shares outstanding change to 82086 from 82084 from 20160129-20160229.
90214	NEW YORK MORTGAGE TRUST INC	had a shares outstanding change to 109360 from 109402 from 20160129-20160229.
92343	RETAIL OPPORTUNITY INVST CORP	had a shares outstanding change to 99590 from 99531 from 20160129-20160229.
92680	AMERICAN CAPITAL AGENCY CORP	had a shares outstanding change to 332453 from 337500 from 20160129-20160229.

201602 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

Permno	Company Name	Ticker	Cusip	Start Date	End Date
DELISTS					
75592	PLUM CREEK TIMBER CO INC	PCL	72925110	1/4/1999	2/19/2016

PERMNO	COMPANY NAME	DESCRIPTION
CHANGES		
12965	AMERICAN CAPITAL MTG INVT CORP	had a shares outstanding change to 47626 from 50010 from 20151231-20160129
13756	GLADSTONE LAND CORP	had a shares outstanding change to 9993 from 9062 from 20151231-20160129
14252	GAMING & LEISURE PROPERTIES INC	had a shares outstanding change to 115594 from 115182 from 20151231-20160129
14651	CARETRUST REIT INC	had a shares outstanding change to 47665 from 48148 from 20151231-20160129
49744	POTLATCH CORP NEW	had a shares outstanding change to 40681 from 40678 from 20151231-20160129
83879	LAMAR ADVERTISING CO NEW	had a shares outstanding change to 82084 from 81987 from 20151231-20160129
89617	EQUINIX INC	had a shares outstanding change to 69025 from 59890 from 20151231-20160129
89823	GLADSTONE COMMERCIAL CORP	had a shares outstanding change to 22486 from 22066 from 20151231-20160129
90092	SABRA HEALTHCARE REIT INC	had a shares outstanding change to 65182 from 65134 from 20151231-20160129
92343	RETAIL OPPORTUNITY INVST CORP	had a shares outstanding change to 99531 from 99485 from 20151231-20160129
92680	AMERICAN CAPITAL AGENCY CORP	had a shares outstanding change to 337500 from 346450 from 20151231-20160129

201601 REIT SUMMARY

CRSP ADDS, DELISTS, AND CHANGES:

Permno	Company Name	Ticker	Cusip	Start Date	End Date
ADDS					
31974	FOREST CITY REALTY TRUST INC	FCEA	34560510	1/4/2016	1/29/2016
65584	FOREST CITY REALTY TRUST INC	FCEB	34560520	1/4/2016	1/29/2016
15719	FOUR CORNERS PROPERTY TRUST INC	FCPT	35086T10	1/4/2016	1/29/2016
DELISTS					
90301	BIOMED REALTY TRUST INC	BMR	09063H10	8/6/2004	1/27/2016

PERMNO	COMPANY NAME	DESCRIPTION
CHANGES		
13752	CYRUSONE INC	had a shares outstanding change to 72593 from 66241 from 20151130-20151231

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 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	11.6 MB	247 MB
Microsoft Access	11.3 MB	212 MB
SAS V 9.1	13.2 MB	262 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 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.

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.