CRSP ZIMAN/REAL ESTATE DATA SERIES RELEASE NOTES

MARCH 2020 MONTHLY UPDATE

ANNOUNCING 'R' FORMAT DATASETS

Starting with the January 2020 data release, the CRSP US Stock and Index Family of Database products became available in 'R' format datasets. The 'R' datasets are in the zip file raz202003_r. zip in the same folder on MOVEit Cloud as the other formats of the data.

MISSING VALUE CHANGES

Starting with the January 2020 datacut (released in February 2020), changes were made to improve the consistency among the ASCII, 'R', ACCESS, and SAS formats.

- In crsp_daily_data and crsp_monthly data – ASCII and MSAccess versions
    - PRC and USDPRC were changed from zero to a missing values
    - USDRET and USDRETX were changed from -66, -77, -99 to missing values
- In crsp_ziman_daily_index – ASCII and MSAccess versions
    - ARET, CONRATIO, HHI, IRET, and TRET – were changed from -99 to missing values

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through March 2020, available in April 2020.
- The data series contains 656 securities of which 216 are currently trading. The date range is from 19800102-20200331.
- This release may be installed on Windows and Linux. ASCII, SAS and R 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.

202003 REIT SUMMARY

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	DESCRIPTION
13752	CYRUSONE INC	SHARES OUTSTANDING CHANGE FROM 114809 TO 114848 FOR 20200214-20200303 AND 114848 TO 115012 FOR 20200304-PRESENT.
13756	GLADSTONE LAND CORP	SHARES OUTSTANDING CHANGE FROM 20937 TO 21346 FOR 20200218-PRESENT.
14252	GAMING & LEISURE PROPERTIES INC	SHARES OUTSTANDING CHANGE FROM 214694 TO 215102 FOR 20200218-PRESENT.

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PERMNO	COMPANY NAME	DESCRIPTION
14279	EXTENDED STAY AMERICA INC	SHARES OUTSTANDING CHANGE FROM 179483 TO 177255 FOR 20200221-PRESENT.
14651	CARETRUST REIT INC	SHARES OUTSTANDING CHANGE FROM 95103 TO 95469 FOR 20200219-PRESENT.
15279	UNITI GROUP INC	SHARES OUTSTANDING CHANGE FROM 192142 TO 193264 FOR 20200304-PRESENT.
17222	INDUSTRIAL LOGISTICS PPTYS TR	SHARES OUTSTANDING CHANGE FROM 65181 TO 65180 FOR 20200219-PRESENT.
49744	POTLATCHDELTIC CORP	SHARES OUTSTANDING CHANGE FROM 67221 TO 67352 FOR 20200214-PRESENT.
79129	BROOKFIELD PROPERTY REIT INC	SHARES OUTSTANDING CHANGE FROM 64024 TO 60083 FOR 20200226-PRESENT.
79782	REGENCY CENTERS CORP	SHARES OUTSTANDING CHANGE FROM 167131 TO 167716 FOR 20200212-PRESENT.
81917	SERVICE PROPERTIES TRUST	SHARES OUTSTANDING CHANGE FROM 164565 TO 164563 FOR 20191231-20200225 AND 164563 TO 164562 FOR 20200226-PRESENT.
83879	LAMAR ADVERTISING CO NEW	SHARES OUTSTANDING CHANGE FROM 86093 TO 86095 FOR 20200131-PRESENT.
86996S	B A COMMUNICATIONS CORP NEW	SHARES OUTSTANDING CHANGE FROM 111775 TO 111929 FOR 20200218-PRESENT.
87289	DIVERSIFIED HEALTHCARE TRUST	SHARES OUTSTANDING CHANGE FROM 237899 TO 237897 FOR 20191231-20200225 AND 237897 TO 237895 FOR 20200226-PRESENT.
89617	EQUINIX INC	SHARES OUTSTANDING CHANGE FROM 85308 TO 85444 FOR 20200220-PRESENT.
90092	SABRA HEALTHCARE REIT INC	SHARES OUTSTANDING CHANGE FROM 205208 TO 205274 FOR 20200214-PRESENT.
90214	NEW YORK MORTGAGE TRUST INC	SHARES OUTSTANDING CHANGE FROM 377510 TO 377468 FOR 20200227-PRESENT.
92343	RETAIL OPPORTUNITY INVST CORP	SHARES OUTSTANDING CHANGE FROM 116496 TO 116455 FOR 20200214-20200227 AND 116455 TO 116796 FOR 20200228-PRESENT.
14575	NEW YORK REIT INC	REMOVED ALL DAILY DATA ON 20181105.

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:

Four individual 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
RAZYYYYMM_R	R FILES	\CRSPDATA\RAZYYYYMM_R

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

SYSTEM REQUIREMENTS

- SAS, Microsoft Access, ASCII, R, 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	10.7 MB	229 MB
MICROSOFT ACCESS	14.4 MB	276 MB
SAS	12.2 MB	248 MB
R FILES	N/A	32.5 MB

*Additional disk space will be needed for data manipulation.

File name specifications and installation information can now be found in the guide.