CRSP/ZIMAN REAL ESTATE DATA SERIES RELEASE NOTES

FILE VERSION SPECIFICS

▪ The CRSP/Ziman Real Estate Data Series contains data through June 2010.

▪ The data series contains 523 securities of which 162 are currently trading.

▪ There is one CD included with 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.

▪ Installation is done with InstallShield®. Because files are compressed, in order to access them, they must first be installed on your computer.

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.

201006 REIT INDEXES SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) added on 20100616.

PERMNO 93419 (HUDSON PACIFIC PROPERTIES INC) added on 20100624.

PERMNO 92343 (RETAIL OPPORTUNITY INVST CORP) is a historical change and began trading as a REIT on 20091022.

CRSP DATABASE CHANGES

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) had a Price and PTYPE change on 20100201. Price went from 7.00 to 6.530 and PType from 10 to 7.

PERMNO 92477 (ARMOUR RESIDENTIAL REIT INC) had a Price and PTYPE change on 20100226. Price went from 7.00 to 0.00 and PType from 10 to 13.

PERMNO 92680 (AMERICAN CAPITAL AGENCY CORP) had a shares outstanding change from 26760 to 32760 for the period 20100525-20100528.

PERMNO 92945 (CYPRESS SHARPRIDGE INVTS INC) had a shares outstanding change from 18761 to 18768 on 20100528.

INDEXES 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 1000862 had an absolute value change of 1000 %

for addcnts on 20091130 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000800 had an absolute value change of 1000 % for addcnts on 20091023 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000812 had an absolute value change of 1000 % for addcnts on 20091023 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000851 had an absolute value change of 1000 % for addcnts on 20091023 due to PERMNO 92343. RETAIL OPPORTUNITY INVST CORP had actually started trading as a REIT on 20091022.

Indno 1000852 had an absolute value change of 1000 % for dropcnts on 20100226 due to PERMNO 92477. ARMOUR RESIDENTIAL REIT INC had a zero name line added for the period 20100201-20100615.

SYSTEM REQUIREMENTS

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

DATA SERIES FORMAT	MONTHLY DATA SERIES	DAILY/MONTHLY DATA SERIES
ASCII	7.76 MB	164 MB
Microsoft Access	7.55 MB	141 MB
SAS V 9.1	9.11 MB	175 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

* present in daily/monthly product only

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*	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	
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

FILE NAME	DESCRIPTION
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	REIT information and index
ziman_reit_info.sas7bndx	

* present in Daily/Monthly product only

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.

DATA INSTALLATION

1. Instructions and screen shots for installation are written for Windows. Differences related to Linux and Sun are noted where applicable.

WINDOWS:

To install data, insert your CD into the drive and from the Start Menu, select Run `d:\setupwin32.exe`. Click **OK** to proceed.

LINUX:

Upon insertion of the CD, a file manager will open with the file, SETUPLINUX.BIN. Double click on this setup file and run in a terminal to begin the installation process.

SUN:

Upon insertion of the CD, a file manager will open with the file, SETUPSOLARIS.BIN. Double click on this file to begin the installation process.

2. After clicking on **Next** on the Welcome screen, scroll through and read the CRSP Data and Utilities Agreement. Click to accept the terms and select **Next**.

3. **WINDOWS:**

The default directory for the data installation is `c:\crspdata\RAZyyyymm for daily/monthly` and `c:\crspdata\RMZyyyymm` for monthly only. You may accept or modify the location. Click Next.

LINUX AND SUN:

The default directory for the data instllation is `/crspdata/RA(or M)Zyyyymm`. You must create a root directory, for example, `/home/username/crspdata/RA(or M)Zyyyymm`.

4. **WINDOWS:**

You have the choice of either a typical or custom installation. The typical installation will install *all* data formats (ASCII, Microsoft Access, and SAS).

LINUX AND SUN:

ASCII and SAS data files are available for installation on Linux and Sun.

5. Selecting the Custom option will allow you to pick and choose the file types that you wish to install to your computer. Once you have checked the files you wish to install, click **Next**.

6. Once files are selected for installation, a confirmation screen with summary information is displayed, including location, data components and the amount of space that is required for the data. You may select the **Back** button if changes are needed, or **Install** to proceed.

7. A message indicating the success of the installation appears when the process is complete. Click **Finish**.