CRSP/ZIMAN REAL ESTATE DATA SERIES RELEASE NOTES

FILE VERSION SPECIFICS

- The CRSP/Ziman Real Estate Data Series contains data through December 2011.

- The data series contains 538 securities of which 169 are currently trading. The date range is from19800102-20111230.

- There is one DVD 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 InstallAnywhere®. 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.

201112 REIT SUMMARY

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	SHARES OUTSTANDING CHANGE	BEG DATE	END DATE
85472	INVESTORS REAL ESTATE TRUST	to 81806 from 81259	20110831	20111030
85472	INVESTORS REAL ESTATE TRUST	to 83682 from 81259	20111031	20111130
92343	RETAIL OPPORTUNITY INVST CORP	to 42152 from 41720	20111102	20111130

201111 REIT SUMMARY

CRSP DATABASE CHANGES

PERMNO	COMPANY NAME	SHARES OUTSTANDING CHANGE	BEG DATE	END DATE
13003	AMERICAN REALTY CAPITAL PROP IN	to 5752 from 5747	20110930	20111031
40468	GYRODYNE COMPANY AMERICA INC	to 1483 from 1290	20110930	20111031
90092	SABRA HEALTHCARE REIT INC	to 36868 from 25138	20110930	20111031
91285	VESTIN REALTY MORTGAGE II INC	to 12721 from 13140	20110930	20111031
92343	RETAIL OPPORTUNITY INVST CORP	to 41720 from 42075	20110930	20111031
92680	AMERICAN CAPITAL AGENCY CORP	to 178512 from 178509	20110729	20110929
92680	AMERICAN CAPITAL AGENCY CORP	to 183620 from 178509	20110930	20111031

201109 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 13003 AMERICAN REALTY CAPITAL PROP INC added on 20110907

PERMNO 35561 PRESIDENTIAL REALTY CORP NEW delisted on 20110920

CRSP DATABASE CHANGES 20110729-20110831

PERMNO	SHARES CHANGE
85472	from 40142 to 40187
92343	from 41638 to 42075

201108 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 12965 AMERICAN CAPITAL MTG INVT CORP added on 20110804

PERMNO 40468 GYRODYNE COMPANY AMERICA INC was added for 20060501-present

CRSP DATABASE CHANGES

PERMNO	SHARES CHANGE	BEG DATE	END DATE
49744	from 40142 to 40187	20110630	20110729
52214	from 22505 to 22585	20110630	20110729
81087	from 22944 to 23005	20110630	20110729
85472	from 80771 to 81259	20110729	20110831
89823	from 9571 to 10771	20110630	20110729
90092	from 25093 to 25138	20110630	20110729
90214	from 9443 to 9451	20110630	20110729
90506	from 9587 to 9702	20110630	20110729
91373	from 6419 to 6341	20110630	20110729
92343	from 41638 to 42075	20110803	20110831
92680	from 172029 to 178509	20110630	20110729

201107 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 12893 (APOLLO RESIDENTIAL MORTGAGE INC) added on 20110722

PERMNO 68312 (NATIONWIDE HEALTH PROPERTIES I) delisted on 20110701

PERMNO 85909 (WALTER INVESTMENT MGMT CORP) changed from a REIT to common stock on 20110706

201106 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 12828 (A G MORTGAGE INVESTMENT TR INC) added on 20110630

PERMNO 80406 (PROLOGIS) delisted on 20110602

PERMNO 55984 (INNSUITES HOSPITALITY TRUST) was removed for the period 20040202-Present

PERMNO 39917 (WEYERHAEUSER CO) was added for 20100104-Present

CRSP DATABASE CHANGE:

PERMNO 52214 had a shares change from 22371 to 22505 for the time period 20110509- 20110630

201105 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 12756 (R L J LODGING TRUST) added on 20110511

CRSP DATABASE CHANGES

PERMNO	SHARES OUTSTANDING CHANGE	BEG DATE	END DATE
49744	from 40033 to 40142	20110331	20110429
81087	from 22918 to 22944	20110415	20110429
90092	from 25061 to 25085	20110331	20110420
90214	from 9425 to 9443	20110316	20110429
92343	from 42075 to 41638	20110331	20110429
92680	from 123966 to 128829	20100331	20110429

201104 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 12668 (PREFERRED APARTMENT CMNTYS INC) added on 20110401

PERMNO 12681 (STAG INDUSTRIAL INC) added on 20110415

CRSP DATABASE CHANGES:

PERMNO 91285 had a shares change from 13322 to 13140 for the time period 20101231-20110331

PERMNO 91373 had a shares change from 6444 to 6419 for the time period 20101231-20110331

PERMNO 92343 had a shares change from 41799 to 42075 for the time period 20110325- 20110331

PERMNO 92477 had a shares change from 32254 to 48254 for the date 20100331

PERMNO	SHARES OUTSTANDING CHANGE	BEG DATE	END DATE
49744	from 40033 to 40142	20110331	20110429
81087	from 22918 to 22944	20110415	20110429
90092	from 25061 to 25085	20110331	20110420
90214	from 9425 to 9443	20110316	20110429
92343	from 42075 to 41638	20110331	20110429
92680	from 123966 to 128829	20100331	20110429

201103 REIT SUMMARY

CRSP DATABASE CHANGES

PERMNO	SHARES OUTSTANDING CHANGE	BEG DATE	END DATE
52214	to 22136 from 22028	20101231	20110131
85472	to 79846 from 79093	20110131	20110228
52214	to 8725 from 8605	20101231	20110131
90092	to 25061 from 24932	20110316	20110429
92343	to 41638 from 41805	20101231	20110228
92680	to 91766 from 88256	20101231	20110228

ZIMAN CLASSIFICATION CHANGES

PERMNO 10952 had a ptype change to 2 from 4 for 19881003-20020524 and a ptype and psubtype change to 9 and 17 from 2 and 4, respectively, for 20020528-present

PERMNO 12070 had a ptype and psubtype change to 2 and 4 from 4 and 13 for its entire history

PERMNO 50614 had a rtype change to 4 from 2 for its entire history

PERMNO 50702 had a ptype and psubtype change to 9 and 17 from 2 and 4, respectively, for its entire history.

PERMNO 55984 had a rtype, ptype, and psubtype change to 4, 2, and 2 from 2, 4, and 8 19721121-19980202 and a ptype and psubtype change to 5 and 9 from 4 and 8 for 19980203-present

PERMNO 56856 had a rtype, ptype, and psubtype change to 3, 6, and 3 from 4, 1, and 1 19730523-20080930 and a ptype and psubtype change to 2 and 4 from 1 and 1 20081001-present

PERMNO 62156 had a rtype, ptype, and psubtype change to 3, 2, and 3 from 4, 1, and 1 for its entire history.

PERMNO 67598 had a rtype change to 4 from 2 for its entire history.

PERMNO 75284 had a rtype, ptype, and psubtype change to 2, 4, and 13 from 3, 6, and 12 for 20080320-present

PERMNO 76602 had a ptype and psubtype change to 4 and 11 from 10 and 16 for 19980318-present

PERMNO 77878 had a rtype change to 4 from 2 for its entire history.

PERMNO 79129 had a ptype and psubtype change to 9 and 17 from 2 and 11 for 20100305-present

PERMNO 80014 had a rtype, ptype, and psubtype change to 3, 6, and 3 from 4, 1, and 1 for its entire history.

PERMNO 84767 had a psubtype change to 1 from 13 for its entire history.

PERMNO 90064 had a rtype, ptype, and psubtype change to 4, 2, and 4 from 3, 6, and 12 for 20071001-present.

PERMNO 90252 had a rtype, ptype, and psubtype change to 4, 8, and 2 from 3, 6, and 12 for its entire history.

PERMNO 92999 had a rtype, ptype, and psubtype change to 3, 6, and 12 from 2, 5, and 9 for its entire history.

INDEX COMPARISON RESULTS:

(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:

INDNOS 1000802 & 1000852 had an absolute value change of 11.66% on 20081030 due to the classification changes to PERMNO 56856

201102 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 12566 (SUMMIT HOTEL PROPERTIES INC) added to the database on 20110209

CRSP DATABASE CHANGES

PERMNO 49744 (POTLATCH CORP NEW) had a shares change from 40007 to 40033 for the time period 20101231-20110131

201101 REIT SUMMARY

CRSP ADDS, DELISTS AND CHANGES

PERMNO 12513 (AMERICAN ASSETS TRUST INC) added to the database on 20110113

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	10 MB	213 MB
Microsoft Access	9.77 MB	182 MB
SAS V 9.1	11.5 MB	226 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
Property_type.sas7bdat	definitions of available REIT property types

FILE NAME	DESCRIPTION
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**.