Wharton
UNIVERSITY of PENNSYLVANIA

The Global Standard for Business Research
wrds
WHARTON RESEARCH DATA SERVICES

Compustat Global in WRDS: The Basics

I. What is Compustat Global?

April 20, 2020

Compustat Global in WRDS: The Basics

1. Highlights
2. Types of Compustat Global data
3. How the Data looks
4. How to filter by country
5. Some Research Questions

Compustat Global in WRDS: The Basics

1. Highlights

   Coverage Frequency Types of Identifiers

2. Types of Compustat Global data

   Fundamental Index Securities

3. How the Data looks
4. How to filter by country
5. Some Research Questions

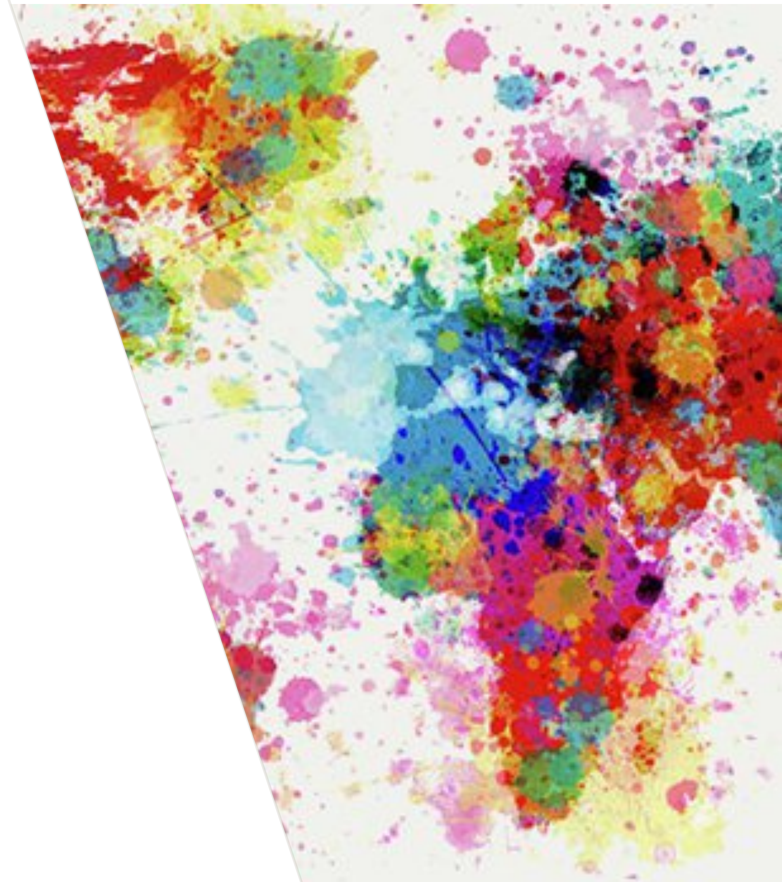
STANDARD & POOR'S

Compustat

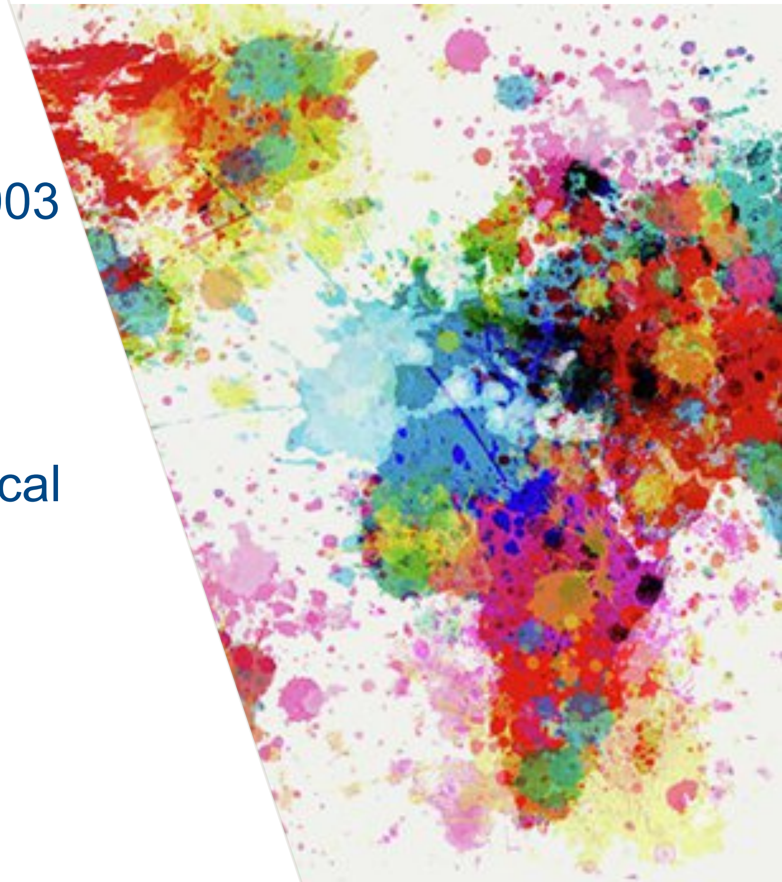
1. Highlights

More than 500 company-level fundamentals in one place

- Covering publicly traded companies in **global markets**
  - More than 80 countries
  - US & Canada in not included
- About 24,000 **active companies** and 10,000 inactive
  - No survivorship bias
- Income Statement, Balance Sheet, Cash Flows and suppl. data items in **local currency**
  - Quarterly and Annual frequencies
- Market data - daily freq.
  - Prices, Dividends, Trading Volume and Shares Outstanding



More than 500 company-level fundamentals in one place



- Times series: since 1986 - annual data; since 2003 for quarterly data
- **Normalized according to the country accounting principles**
- Global Indices: Constituents and Prices on 90 local market indexes
- **Currency files** with cross-translation tables for more than 110 currencies

- **Main identifier: GVKEY**
  - In case of M&A, the GVKEY of acquiring company remains while the acquired is set to inactive. Including other id: ISIN, and SEDOL.

2. Types of Compustat Global Data

Types of Compustat Global data

1. Fundamentals – Annual and Quarterly
2. Index Constituents and Index Prices
3. Security Daily

3. How the Data looks…

Annual Fundamentals Data for Canon Inc.

GVKEY	Data Date	Assets - Total	Cap. Ex.	EBITDA	Liabilities - Total	Company Name	ISO Currency Code	Current ISO Country Code
2721	20091231	3847557	327983	532448	968157	CANON INC	JPY	JPN
2721	20101231	3983820	199152	663745	1174183	CANON INC	JPY	JPN
2721	20111231	3930727	238129	639414	1217060	CANON INC	JPY	JPN
2721	20121231	3955503	316211	581989	1201201	CANON INC	JPY	JPN
2721	20131231	4242710	233175	612450	1175933	CANON INC	JPY	JPN
2721	20141231	4460618	218362	626969	1319860	CANON INC	JPY	JPN
2721	20151231	4427773	252948	628537	1243310	CANON INC	JPY	JPN
2721	20161231	5138529	206971	478962	2143907	CANON INC	JPY	JPN
2721	20171231	5198291	189484	593360	2102116	CANON INC	JPY	JPN
2721	20181231	4899465	191399	594506	1881552	CANON INC	JPY	JPN

Index Monthly Prices Data for S&P Global 100

Global Index Key	Index Name	Ticker	Data Date	Price - Close	Price - High	Price - Low
150919	S&P Global 100 Index	I6UNK111	20190430	1989.1893	1994.5338	1939.9741
150919	S&P Global 100 Index	I6UNK111	20190531	1859.4058	1992.9249	1859.4058
150919	S&P Global 100 Index	I6UNK111	20190630	1981.6323	1993.0925	1855.8894
150919	S&P Global 100 Index	I6UNK111	20190731	1991.7387	2022.9636	1991.7387
150919	S&P Global 100 Index	I6UNK111	20190831	1940.0857	1980.0879	1898.0609
150919	S&P Global 100 Index	I6UNK111	20190930	1997.9219	2010.6484	1932.5786
150919	S&P Global 100 Index	I6UNK111	20191031	2055.112	2059.6898	1938.3221
150919	S&P Global 100 Index	I6UNK111	20191130	2103.2725	2114.7732	2071.8001
150919	S&P Global 100 Index	I6UNK111	20191231	2190.0244	2196.7965	2074.7008
150919	S&P Global 100 Index	I6UNK111	20200131	2199.0863	2254.9291	2196.1875
150919	S&P Global 100 Index	I6UNK111	20200229	1998.8366	2290.3172	1998.8366
150919	S&P Global 100 Index	I6UNK111	20200331	1806.0028	2109.807	1573.9966

Index Constituents Data for S&P Global 100 (extract)

GVKEY - Index Constituent	Global Index Key	Index Name	Effective From Date	Effective Thru Date	Ticker	Company Name	Company ISIN
2410	150919	S&P Global 100 Index	19890929		I6UNK111	BP PLC	GB0007980591
2721	150919	S&P Global 100 Index	19890929		I6UNK111	CANON INC	JP3242800005
5180	150919	S&P Global 100 Index	19890929		I6UNK111	GLAXOSMITHKLINE PLC	GB0009252882
5691	150919	S&P Global 100 Index	19890929		I6UNK111	HONDA MOTOR CO LTD	JP3854600008
7114	150919	S&P Global 100 Index	19890929		I6UNK111	PANASONIC CORP	JP3866800000
8546	150919	S&P Global 100 Index	19890929		I6UNK111	KONINKLIJKE PHILIPS NV	NL0000009538
9818	150919	S&P Global 100 Index	19890929		I6UNK111	SONY CORP	JP3435000009
12673	150919	S&P Global 100 Index	19890929		I6UNK111	BARCLAYS PLC	GB0031348658
13312	150919	S&P Global 100 Index	19890929		I6UNK111	BHP GROUP LTD	AU000000BHP4
13683	150919	S&P Global 100 Index	19890929		I6UNK111	TELEFONICA SA	ES0178430E18
14894	150919	S&P Global 100 Index	19890929		I6UNK111	VODAFONE GROUP PLC	GB00BH4HKS39
15181	150919	S&P Global 100 Index	19890929		I6UNK111	BBVA	ES0113211835
15319	150919	S&P Global 100 Index	19890929		I6UNK111	REPSOL SA	ES0173516115
15509	150919	S&P Global 100 Index	19890929		I6UNK111	HSBC HLDGS PLC	GB0005405286
15576	150919	S&P Global 100 Index	19890929		I6UNK111	DEUTSCHE BANK AG	DE0005140008

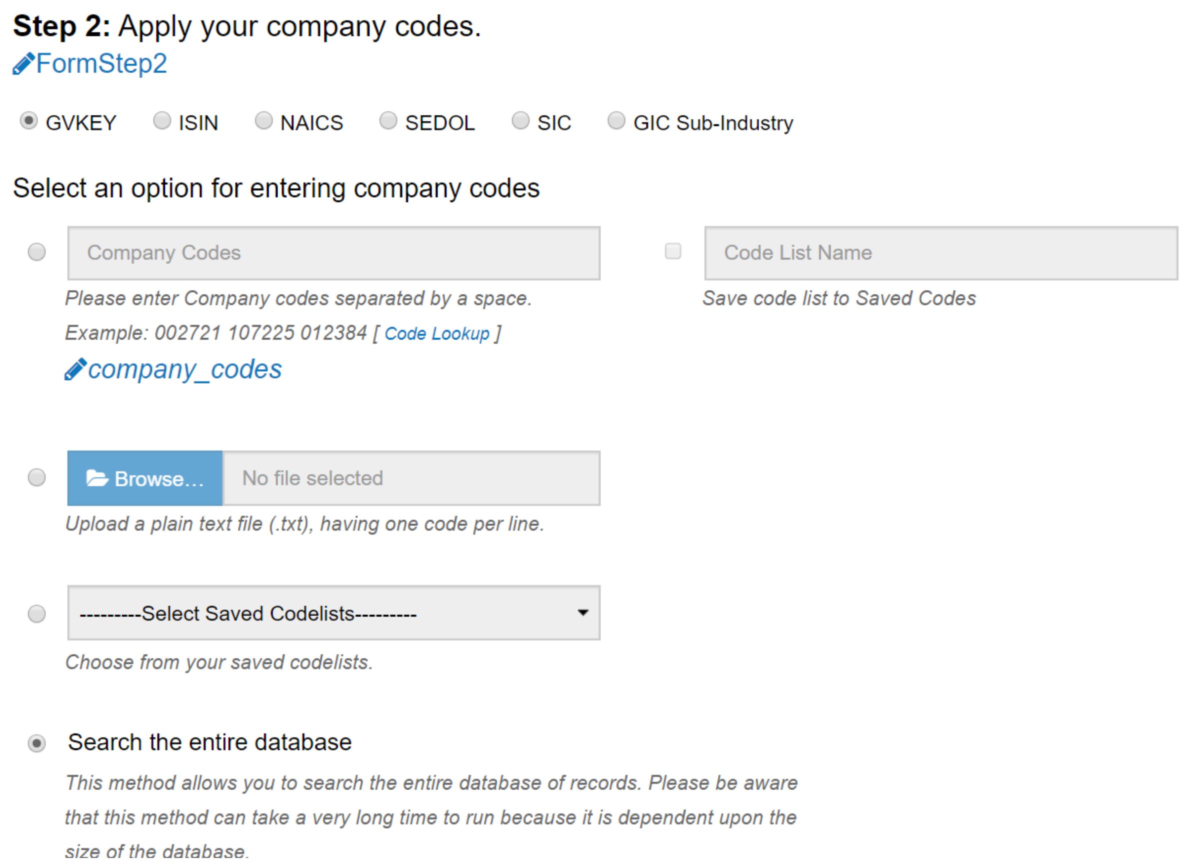
Security Daily data for Royal Dutch Shell PLC

GVKEY	Issue ID	Data Date	Company Name	SEDOL	ISO Currency Code	Country Code	Shares Out.	Trading Vol.	Price - Close	Price - High	Price - Low
12384	01W	20180102	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	4172586	24.755	24.8237	24.4955
12384	01W	20180103	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	3984906	25.115	25.2005	24.77
12384	01W	20180104	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	4233670	25.33	25.37	25.15
12384	01W	20180105	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	3891992	25.3	25.375	25.215
12384	01W	20180108	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	3188072	25.255	25.415	25.235
12384	01W	20180109	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	3562961	25.35	25.42	25.205
12384	01W	20180110	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	4055461	25.57	25.57	25.345
12384	01W	20180111	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	5512885	25.705	25.705	25.465
12384	01W	20180112	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	4718128	25.735	25.795	25.54
12384	01W	20180115	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	3226429	25.67	25.745	25.6
12384	01W	20180116	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	4352505	25.425	25.7705	25.425
12384	01W	20180117	ROYAL DUTCH SHELL PLC	B03MLX2	GBP	NLD	4597136050	5269414	25.235	25.47	25.105

4. How to Filter by Country

How to filter by Country

If you would like to download data for all covered companies in a specific country, you can use the Country Code filter in the Web Query. In step two, select search the entire database


Step 2: Apply your company codes.

FormStep2

GVKEY ISIN NAICS SEDOL SIC GIC Sub-Industry

Select an option for entering company codes

Company Codes

Please enter Company codes separated by a space.

Example: 002721 107225 012384 [Code Lookup]

company_codes

Code List Name

Save code list to Saved Codes

Browse… No file selected

Upload a plain text file (.txt), having one code per line.

---------Select Saved Codelists---------

Choose from your saved codelists.

Search the entire database

This method allows you to search the entire database of records. Please be aware that this method can take a very long time to run because it is dependent upon the size of the database.

How to filter by Country

Below Step two, after the Screening Variables, you will see the Country code box. Select the code of your country of interest, then move on forward with the following steps of the query.

Screening Variables

Several screening variables are pre-selected to produce one record per GVKEY-DATADATE pair, while keeping the vast majority of records. Examples of excluded rows include those with restated data, different views of the same data (pro forma, pre-FASB). Click on each variable for a more detailed explanation.

Consolidation Level	☑ C	☐ N	☑ Output
Industry Format	☑ INDL	☑ FS	☑ Output
Data Format	☑ HIST_STD	☐ RST_STD	☑ Output
Population Source	☑ I	☐ D	☑ Output
Company Status	☑ A	☑ I	☑ Output

Country Code

All Countries ▾

☑ Output

Show step 3 FAST & Step4 just for completion

5. Some Research Questions

Some Research Questions

A Calculating the Market Value of a Firm

B Adjusting the Daily Securities Prices for Stock Splits

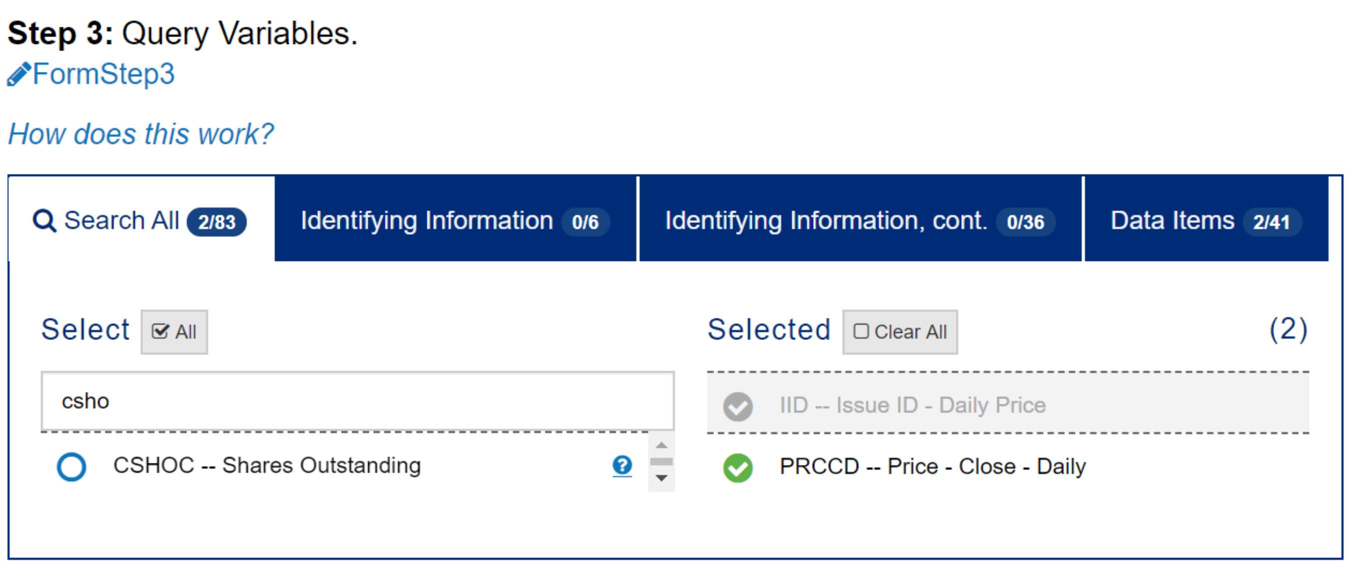
C Computing Returns

A. Calculating the Market Value of a Firm

Calculating the Market Value of a Firm

Market value of equity as of the December end of any given fiscal year can be obtained as a product of the close market price at the calendar year end (PRCCD variable in Compustat Global Security Daily) times the shares outstanding (CSHOC). CSHO represents the net number of all common shares outstanding at year-end, excluding treasury shares.

Market Value = PRCCD x CSHOC.



B. Adjusting the Daily Securities Prices for Stock Splits

Adjusting the Daily Securities Prices for Stock Splits

You can use the variable AJEXDI (adjustment factor) to adjust the prices in Compustat.

Adjusted close price = PRCCD/AJEXDI

C. Computing Returns

Computing Returns

To compute returns, you will need to apply a DAILY RETURN FACTOR (variable TRFD) to the close price. That is, multiplying the current adjusted close price (PRCCD/AJEXDI) by the current total return factor (TRFD) and dividing the result by the product of the adjusted close price of the prior period multiplied by the Total Return Factor of the prior period.

IMPROVE THIS EXPRESSION

(((((PRCCD/AJEXDI)*TRFD) /((PRCCD(PRIOR)/AJEXDI(PRIOR))*TRFD(PRIOR))) -1)* 100).

TRFD includes Cash Equivalent Distributions + reinvestment of dividends and the compounding effect of dividends paid on reinvested dividends.

If you are looking for a price only return, do not use the total return factor. **WHY??**

Summary

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