



Wharton
UNIVERSITY of PENNSYLVANIA

The Global Standard for Business Research

wrds

WHARTON RESEARCH DATA SERVICES

VALUE PROPOSITION
&
SHORT GUIDE

2020

Wharton Research Data Services (WRDS)

1

WRDS Snapshot

2

Who we serve

3

Data Content

4

How WRDS works

1. WRDS Snapshot

Single source for leading global and research databases

- Gold standard for global financial research
- Variety of Disciplines: Accounting, Banking, Economics, Finance, Insurance, Marketing, Statistics
- Entity Management and Data Linking: e.g. CRSP (stock prices) & COMPUSTAT (Fundamentals)

Internet-based and individual accounts to access from anywhere. Flexible Delivery & Access Options

- Web Queries: Easy-to-Use, Point-and-Click Interface
- WRDS Cloud – Scalable High Performance Computing & Storage
- Unix Terminal Connection

Full-time Research, Support & E-Learning

- Ph.D. Research and Expert Technical Support
- Online Help and 24/7 System Monitoring
- Extensive E-Learning Live and On-Demand
- Comprehensive Knowledge Base
- Proprietary Research Applications, Programs and Utilities

RESEARCH BENEFITS

- WRDS significantly reduces time to data discovery, analysis and publication, greatly increasing researcher productivity.
- WRDS has been able to improve research efficiency and speed time required for academic research by as much as 40% vs. similar institutions that do not use WRDS.
- Intuitive and flexible interface for all constituents
- Extensive suite of sample programs to assist customized, personalized and complex research analyses
- Comprehensive support from expert personnel including Ph.D.'s and data specialists
- Integrated access to numerous datasets across multiple disciplines



ADDITIONAL BENEFITS

- Data validation and integrity, ensuring timely updates and ready-to-use standardized data immediately available for analysis.
- Multiple interfaces (web, analytical software, computing platform) and teaching tools provides ease of use and flexibility.
- Proprietary linking routines to integrate datasets, sample programs, and data linking utilities speed research time and productivity considerably.
- Valuable recruiting tool to help attract and retain leading faculty and other thought leaders to your institution
- Prestige of providing the industry gold standard for global financial research that the leading global business schools provide to their faculty and students.

Who we serve

Wharton Research Data Services (WRDS)

- 
- **Over 50,000 Users in 35 Countries**
 - **500+ Subscribers** including:
Harvard University, Stanford University, University of Chicago, Columbia University and most major business schools globally
 - **45+ Data Vendors** including:
Capital IQ, CRSP, NYSE Euronext TAQ, FactSet and Refinitiv
 - **300+ Terabytes of Data and Fast Cloud Computing Environment**
 - **PhD Level Research Support**

Data Content

COMPANY FINANCIALS

FINANCIAL STATEMENTS

- S&P Compustat
- Thomson Reuters Worldscope
- Factset Fundamentals
- BvD Amadeus
- BvD Osiris
- PACAP Pacific Basin
- CSMAR Financials — China Stock Market & Accounting Research
- S&P Capital IQ Capital Structure
- Calcbench As-Reported Filings & Footnotes

AUDIT & REGULATORY FILINGS

- WRDS SEC Analytics Suite
- Audit Analytics
- S&P Filings Database

BANKS

- S&P Compustat Bank
- SNL
- BvD Orbis Bank Focus
- Bank Regulatory Call Reports — Federal Reserve Bank of Chicago
- FRB H15 Interest Rates
- S&P Compustat Segments
- Thomson Reuters Worldscope Segments

SEGMENTS / INDUSTRY DATA

- S&P Compustat Industry-Specific
- Thomson Reuters I/B/E/S KPI
- Factset Revere
- BvD Ibis Insurance Companies

COMPENSATION

- S&P Compustat Execucomp
- S&P Capital IQ People Intelligence
- ISS Incentive Lab
- BoardEx
- MSCI: GMI Ratings

INTELLECTUAL PROPERTY

- kEMINE

FINANCIAL MARKETS, PRICES, RETURNS

STOCK PRICES

- CRSP
- Compustat
- Factset
- Thomson Reuters Worldscope
- LSPD - London Share Price Database
- CSMAR Trading - China Stock Market & Accounting Research
- OTC Markets
- PACAP Pacific Basin

ANALYST ESTIMATES

- Thomson Reuters I/B/E/S
- Zacks

INTRADAY TRADES AND QUOTES

- NYSE TAQ
- ISSM
- GovPX

INDICES AND FACTORS

- CRSP Indices
- S&P Compustat
- Fama French & Liquidity Factors
- IHS Global Insight
- Market Securities Finance
- Market Credit Indices

BONDS AND FIXED INCOME

- Mergent FISD
- TRACE Bond Transactions
- MSRB Muni Bond Transactions
- WRDS-Reuters DealScan
- CRSP Treasuries
- GovPX
- Market Securities Finance
- S&P Capital IQ Credit Ratings



MUTUAL FUND / HEDGE FUND / ETF RETURNS

- CRSP Mutual Funds
- MFLinks
- Morningstar CISDM Hedge Funds
- HFR – Hedge Fund Research
- Thomson Reuters Lipper (Tass) Hedge Funds
- Eureka Hedge
- ETF Global

DERIVATIVES / OPTIONS

- Optionmetrics
- Markit Credit Default Swaps
- CBOE Indexes

REITS

- CRSP Ziman REITs

CURRENCY EXCHANGE RATES

- FRB Foreign Exchange Rates
- S&P Compustat Currency Conversion Tables

OWNERSHIP

- Thomson Reuters (SP) Mutual Fund Holdings
- Thomson Reuters (SP) 13f Holdings
- Thomson Reuters (OP) Global Ownership
- Factset Ownership (Lionshares)
- CRSP Mutual Fund Holdings
- MFLinks
- ETF Global
- Thomson Reuters Insider Transactions
- 2iQ Global Insider Transaction
- ISS Directors
- MSCI: GMI Ratings - Directorships

MERGERS & ACQUISITIONS

- Thomson Reuters SDC
- S&P Capital IQ Transactions
- Levin Associates Healthcare M&A

ESG: ENVIRONMENTAL, SOCIAL, GOVERNANCE

- Sustainalytics
- Reprisk
- MSCI: KLD
- MSCI: GMI Ratings
- ISS Governance
- ISS Directors
- ISS Voting Analytics
- Boardex

ECONOMICS

- IHS Global Insight
- FRB H10 and H15 Interest Rates
- Penn World Tables

MARKETING

- comScore Web Behavior
- Infogroup
- IRI Marketing Factbook (Legacy)

NEWS

- RavenPack News Analytics
- S&P Capital IQ Key Developments

HEALTHCARE

- American Hospital Association
- IMS – SK&A Office-Based Physicians
- ProPublica Dollars4Docs
- ProPublica Prescriber Checkup
- Levin Associates Healthcare M&A
- AHRQ HCUP
- AHRQ MEPS
- Clarivate Analytics

How WRDS works

- Type of accounts
- WRDS Reps
- Request an individual account
- First steps using WRDS

Type of Accounts -access is online and individual-

Faculty & Ph.D.

Unlimited access through the web, SSH, and/or FTP, and include 10 GB of permanent disk storage. Faculty and doctoral students will have their own password access.

Research Assistant

Available to graduate and undergraduate students performing research for a faculty member. These accounts allow access via web, SSH, and/or FTP, and include 10 GB of permanent disk storage.

Master & Undergrad

Available to full-time masters students of member institutions. Accounts allow unlimited access via the WRDS website, no disk storage, and expire at the end of the semester.

Staff

Staff accounts allow unlimited access via web, SSH, and/or FTP, and include 10 GB of permanent disk storage.

Visitors

Visitor Faculty (non-permanent or part-time position, or those on a limited appointment). These accounts allow unlimited access via web, SSH, and/or FTP, and include 10 GB of permanent disk storage.

Class

Class accounts may be requested by standing faculty of member institutions and are used to access the WRDS web interface. Primarily for student usage that is associated with a specific class and all students in the class share the same password.

The WRDS Representative

Who is the WRDS Rep?

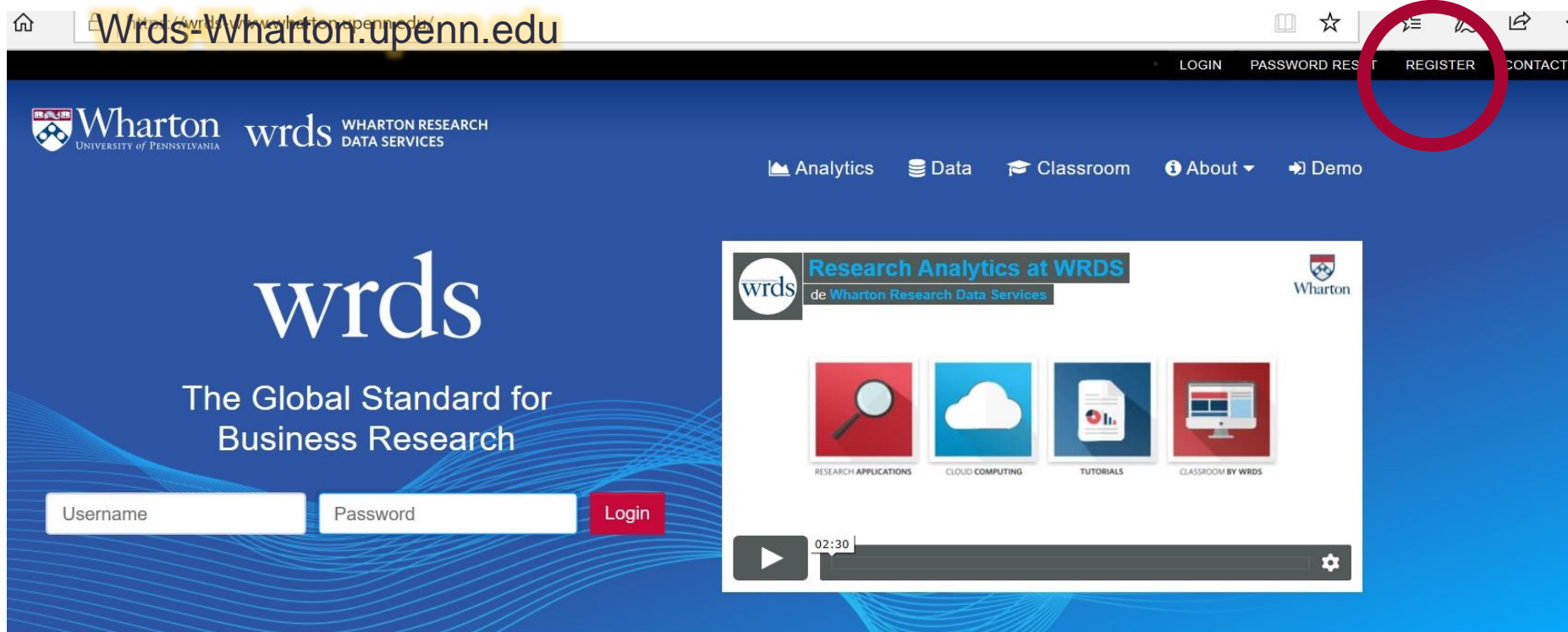
- Subscribing institutions have at least **2 WRDS Representatives** (Librarians).
- The role of the WRDS Representative involves a **minor time** but is essential in helping us to ensure an effective communication. The 4 responsibilities we ask of our Reps:
 - The WRDS Rep will serve as a **liaison** between the WRDS staff and the users (notices regarding system upgrades, addition of new vendors, scheduled maintenance, etc).
 - The WRDS Rep will **monitor account requests** by verifying that a requestor is indeed standing Faculty, a PhD student, authorized research assistant or staff member at the University. Whenever a user from a subscriber institution submits an account request, we will send an e-mail notification to the WRDS Rep. Then this person will go to the URL indicated in the message and follow the instructions to approve the request.
 - The WRDS Rep will **disable accounts** after users leave your institution. Extend expiration dates when necessary.
 - The WRDS Reps will **notify** department heads/chairs regarding WRDS administrative changes (i.e.: modification of WRDS fee structure, procedures, etc.).

How to Request an Individual Account

Once your institution is onboard, ALL affiliated profiles can follow these steps:

1 – Go to: 

2 – Click here: 



The screenshot shows the Wharton Research Data Services (WRDS) website. The URL in the browser is [Wrds-Wharton.upenn.edu](http://wrds-wharton.upenn.edu). The navigation menu includes LOGIN, PASSWORD RESET, REGISTER, and CONTACT. The main content area features the Wharton logo, the text "wrds WHARTON RESEARCH DATA SERVICES", and a navigation bar with Analytics, Data, Classroom, About, and Demo. The central banner displays "wrds The Global Standard for Business Research" and a login form with fields for Username and Password, and a Login button. A video player is visible on the right side of the banner.

35

Countries

500

Subscribing Institutions

50,000

WRDS Users



Register for WRDS

Username

 Please choose a username.

Required. 4 to 15 characters long. Lowercase letters, digits, and _ only. Must start with a letter.

Password

 Please choose a password.

- Your password must contain at least 12 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation

 Please choose a password.

Enter the same password as before, for verification.

First name

Last name

Email address

 Please enter your institutional email address.

Subscriber

User type


The account type of this user.

Expiration date

Department

And finally, click the 'Register' tab:

Register for WRDS



Now, users will be able to access through their
usernames & passwords
from anywhere in the world with internet connection:

<https://wrds-www.wharton.upenn.edu/>

First steps: our Homepage

Main Tool Bars

Subscriptions

Data Dashboard >>

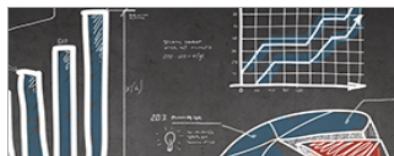
» WRDS Internal	View the subscriptions in your institution; unsubscribed databases are shown in GREY	
» 2iQ	» Federal Judicial Center	» Option Metrics
» American Hospital Association	» Federal Reserve Bank	» Option Suite by WRDS
» AuditAnalytics	» Financial Ratios Suite by WRDS	» OTC Markets
» B Impact Assessment	» FTSE/Russell	» PACAP
» Bank Regulatory	» GovPX	» Penn World Tables
» Beta Suite by WRDS	» GSOnline	» Peters and Taylor Total Q
» Blockholders	» Healthbase	» PHLX
» BoardEx	» Hedge Fund Research	» Preqin
		» ProPublica

WRDS News

- 21 JAN** Are healthcare wraparound services effective in reducing costly hospital ...
January 21st, 2020
- 14 JAN** Analyze Trends on 9,400+ Companies using S&P Global Transcripts ...
January 14th, 2020
- 02 DEC** What is the Impact of Machine Learning on Mortgage ...
December 2nd, 2019

Analytics by WRDS

All Topics >>



SEC Analytics Suite

Researchers will gain an overview of WRDS' powerful SEC research



U.S. Daily Event Study

Investigate abnormal stock returns/volumes around event dates



Intraday Indicators

Stock specific daily and intraday (5 min, 15 min and 30 min) indicators

Events

- 26 FEB** ICAL (International Conference of Asian Libraries)
Lucknow, India
- 11 MAR** SOUCABL (Southern University and College Academic Business Librarians Conference)
Athens, GA

Get Data tab

Find products and vendors your institution is subscribed to, including any trial subscriptions.

Wharton UNIVERSITY of PENNSYLVANIA **wrds** WHARTON RESEARCH DATA SERVICES

Search WRDS

Get Data Analytics Classroom Research Support

VENDORS

- CRSP
- Compustat - Capital IQ
- IBES
- TAQ
- WRDS SEC Analytics Suite

CONCEPTS

- Stock Prices
- Company Financials
- Earnings Forecasts & Ratings
- Corporate Governance & Ownership
- Economics Data
- Marketing Data

COMPANIES / VARIABLES

- Find Companies
- Find Variables

PROGRAMS

- SAS Studio

EXTERNAL DATA SOURCES

- Political
- Regulatory
- Healthcare

QUERIES

- Currently Running Queries
- Recent Queries
- Saved Queries

Search by vendor

Search by areas of research

All Data

DOWNLOAD DATA USING OUR WEB QUERY

Select the vendor and dataset

The screenshot shows the Wharton WRDS website interface. At the top, there is a navigation bar with the Wharton logo, the text 'wrds WHARTON RESEARCH DATA SERVICES', a search bar labeled 'Search WRDS', and several menu items: 'Get Data', 'Analytics', 'Classroom', 'Research', and 'Support'. Below the navigation bar is a breadcrumb trail: 'Home / Get Data / Compustat - Capital IQ / Compustat / North America - Daily / Compustat Daily Updates - Fundamentals Quarterly'. A secondary navigation bar contains links for '[RESET | FNAV | FFORM]'. The main content area is divided into a left sidebar and a main panel. The sidebar lists various datasets, with 'Fundamentals Quarterly' highlighted by a red box. The main panel has a top navigation bar with tabs: 'Query Form', 'Variable Descriptions', 'Manuals and Overviews', 'FAQs', and 'Dataset List'. Below this, the text 'Compustat Additional information about S&P Compustat database' is displayed. There are links for 'alert' and 'documentation'. The main panel is divided into two steps: 'Step 1: Choose your date range.' and 'Step 2: Apply your company codes.'. Step 1 includes a 'Date Variable' dropdown set to 'Data Date' and a 'Date range' field with '2010-01' and '2020-02'. Step 2 includes radio buttons for 'TIC', 'GVKEY', 'CUSIP', 'SIC', 'NAICS', 'CIK', and 'GIC Sub-Industry'. Below this, there is a section 'Select an option for entering company codes' with two options: 'Company Codes' (selected) and 'Code List Name'.

STEP 1: ENTER THE DATE RANGE

Query Form	Variable Descriptions	Manuals and Overviews	FAQs	Dataset List
------------	-----------------------	-----------------------	------	--------------

Compustat Daily Updates - Fundamentals Quarterly

 [alert](#)

 [documentation](#)

Step 1: Choose your date range.

 [FormStep1](#)

Date Variable:

Date range

2018-01	to	2019-12
---------	----	---------

For this example, enter 2018 January to 2019 December

STEP 2: ENTER THE COMPANIES

Make sure Ticker is selected

Step 2: Apply your company codes.

[FormStep2](#)

- TIC GVKEY CUSIP SIC NAICS CIK GIC Sub-Industry

Select an option for entering company codes

-

Please enter Company codes separated by a space.

Example: IBM MSFT DELL [[Code Lookup](#)]

[company_codes](#)

- 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.

Enter the ticker symbols of the companies to search: IBM AMZN.

Use "Code Lookup" to find the codes if you do not know the ticker symbols.

Compustat Daily Updates - Fundamentals Quarterly Code Lookup

Amazon Starts With Contains Is Exactly

The Company Code Lookup Tool is designed to find all identifiers associated with a specific company. This tool can retrieve identifiers for multiple companies, then add the codes directly to your query. You can also use this tool to save and download codes for future queries. Downloaded codes are saved in the text (.txt) file format.

1. Start by entering a company name (or part of the name) into the search box above.
2. After the results are displayed, make your selections and chose an identifier.
3. Next, refine your list of codes or add more.
4. Last, choose whether to insert your selections into your web query or to download them as a text file for later use.

Need more help?
Take a moment to [read the full step-by-step instructions](#) to using this tool, including a [complete list of identifiers available](#).

1 results found that start with "Amazon"

<input type="checkbox"/>	ENTITY_NAME	TICKER	CUSIP_FULL	CIK	SIC	GVKEY	FIRST_DATE	LAST_DATE
<input checked="" type="checkbox"/>	AMAZON.COM INC.	AMZN	023135106	0001018724	5961	064768	1995	2018

[Export all results as a spreadsheet](#)

Select Your Identifier

TICKER CUSIP_FULL CIK SIC GVKEY

STEP 3: SELECT THE VARIABLES

Search All **6/674** Identifying Information **2/7** Identifying Information, cont. **0/34** Company Desc **>>**

Select All

Search All

- CUSIP
- CIK Number
- Stock Exchange Code
- Fiscal Year-End
- Foreign Incorporation Code
- ADD1 -- Address Line 1
- ADD2 -- Address Line 2
- ADD3 -- Address Line 3
- BUSDESC -- S&P Business Description

Selected Clear All **(6)**

- Company Name
- Ticker Symbol
- ATQ -- Assets - Total
- LTQ -- Liabilities - Total
- TEQQ -- Stockholders Equity - Total
- NIQ -- Net Income (Loss)

Choose the variables you want from the Query Variables list

Screening function available when needed; for this example, leave it blank.

Click on the Question Mark for additional help on the variable explanation. For example, Stock Exchange Code (EXCHG) gives you the details on each code.

Stock Exchange Code
Variable Name = EXCHG

This item identifies the major exchange on which the company's Common/Ordinary Stock (Capital) is traded. Below are some of the common exchange codes. A complete list is available in the CompuStat manual.

Code	Description	Exchange Country
0	Subsidiary/Private	Canada
0	Subsidiary/Private	United States
1	Non-traded Company or Security	Canada
1	Non-traded Company or Security	Germany
1	Non-traded Company or Security	Switzerland
1	Non-traded Company or Security	Taiwan
1	Non-traded Company or Security	United States
2	Consolidated Parent or Tracking Stock Company	United States

Conditional Statements (Optional)

How does this work?

AND OR

Remove Conditional Statement Builder Add rule Add group

↑ ↓

Query Preview: * Please complete your conditional statement to see the preview *

STEP 4: SELECT THE OUTPUT FORMAT

Step 4: Select query output.

 [FormStep4](#)

Select the desired [format](#) of the output file. For large data requests, select a compression type to expedite downloads. If you enter your email address, you will receive an email that contains a URL to the output file when the data request is finished processing.

Output Format

- fixed-width text (*.txt)
- comma-delimited text (*.csv)
- Excel spreadsheet (*.xlsx)
- tab-delimited text (*.txt)
- HTML table (*.htm)
-
- SAS Windows_32 dataset (*.sas7bdat)
-
- SAS Windows_64 dataset (*.sas7bdat)
- SAS Solaris_64 dataset (*.sas7bdat)
- dBase file (*.dbf)
- STATA file (*.dta)
- SPSS file (*.sav)

Compression Type

- None
- zip (*.zip)
- gzip (*.gz)

Date Format

- YYMMDDn8. (e.g. 19840725)
- DATE9. (e.g. 25JUL1984)
- DDMMYY6. (e.g. 250784)
- MMDDYY10. (e.g. 07/25/1984)
- DDMMYY10. (e.g. 25/07/1984)
- YYMMDDs10. (e.g. 1984/07/25)

For this example, select csv as output format

QUERY RESULTS

Download the cvs file in Excel.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	gvkey	datadate	fyearq	fqtr	indfmt	consol	popsrc	datafmt	tic	conm	curcdq	datacqtr	datafqtr	atq	ltq	niq	teqq	costat
2	6066	20180331	2018	1	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2018Q1	2018Q1	125285	106995	1679	18290	A
3	6066	20180630	2018	2	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2018Q2	2018Q2	121622	102974	2404	18648	A
4	6066	20180930	2018	3	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2018Q3	2018Q3	121990	102072	2694	19918	A
5	6066	20181231	2018	4	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2018Q4	2018Q4	123382	106453	1951	16929	A
6	6066	20190331	2019	1	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2019Q1	2019Q1	130926	114320	1591	16606	A
7	6066	20190630	2019	2	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2019Q2	2019Q2	154652	136876	2498	17776	A
8	6066	20190930	2019	3	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2019Q3	2019Q3	149620	131524	1672	18096	A
9	6066	20191231	2019	4	INDL	C	D	STD	IBM	INTL BUSINESS MACHINES CORP	USD	2019Q4	2019Q4	152186	131201	3670	20985	A
10	64768	20180331	2018	1	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2018Q1	2018Q1	126362	94899	1629	31463	A
11	64768	20180630	2018	2	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2018Q2	2018Q2	134100	99105	2534	34995	A
12	64768	20180930	2018	3	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2018Q3	2018Q3	143695	104570	2883	39125	A
13	64768	20181231	2018	4	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2018Q4	2018Q4	162648	119099	3027	43549	A
14	64768	20190331	2019	1	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2019Q1	2019Q1	178102	129692	3561	48410	A
15	64768	20190630	2019	2	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2019Q2	2019Q2	191351	138290	2625	53061	A
16	64768	20190930	2019	3	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2019Q3	2019Q3	199099	142591	2134	56508	A
17	64768	20191231	2019	4	INDL	C	D	STD	AMZN	AMAZON.COM INC	USD	2019Q4	2019Q4	225248	163188	3268	62060	A

Variable Descriptions provide you the Variable Reference so you could look up the header names and variable descriptions.

Analytics tab

Designed to improve efficiency and avoid creating sophisticated programs

All Topics

Efficient Frontier

Event Study

Financial Ratios

Other Research Tools

Programming Tools

SEC



U.S. Daily Event Study

Investigate abnormal stock returns/volumes around event dates by uploading your own "events" file, or analyzing reaction to firm-specific events from Capital IQ's Key Development database.

- Instant visualization of the effect of events on U.S. equities
- Output includes statistics, plots

[More »](#)



SEC Filings Search

Use this powerful research platform to search the contents of the most commonly used SEC filings—over 3.4 million reports—filed by more than 94 thousand companies.

- Easy-to-use web queries
- Daily updates
- Links to original HTML and text filings

[More »](#)

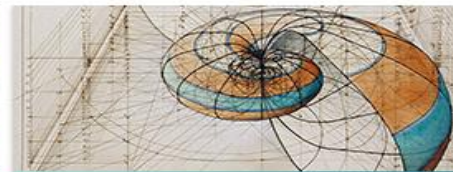


Intraday Indicators

Stock specific daily and intraday (5 min, 15 min and 30 min) indicators created from the TAQ intraday dataset.

- Stock specific daily and intraday (5 min, 15 min and 30 min) indicators.
- Requires subscription to TAQ dataset.

[More »](#)



Financial Ratios: Firm Level

With the Financial Ratios: Firm Level tool you can access over 70 pre-calculated financial ratios for all U.S. companies across eight different categories.

- Calculates ratios most commonly used in accounting and finance research
- Monthly time series of financial ratios per company

[More »](#)



Beta Suite by WRDS

Beta Suite is a powerful engine allowing you to calculate stock level alpha and betas on various common risk factors.

- Daily, weekly, or monthly return frequencies
- Select from four risk models for regression



U.S. Intraday Second-by-Second Event Study

Conduct a high frequency intraday event study by utilizing underlying NYSE Trade and Quote (TAQ) data. Options include uploading your own "events" file, or using corporate and macro-economic news events provided by RavenPack News Analytics database.

- Second-by-second effect of events on



Linking Suite by WRDS

Link tables between the most frequently-used databases on the WRDS platform:

- U.S. corporate bond data to equity data from CRSP
- IBES TICKER to CRSP PERMNO
- OptionMetrics SECID to CRSP PERMNO
- Daily TAQ symbol root to CRSP PERMNO
- TAQ symbol to CRSP PERMNO



International Event Study (Compustat Global)

Expand global market research using security returns directly from Compustat Global and index returns computed by WRDS from underlying Compustat Global data. You can upload your own "events" file, or use corporate events from Capital IQ's Key Development database.

- Instant visualization of the effect of

Classroom tab Teaching and learning toolkit designed for faculty use in the classroom.

All Topics Accounting Fixed Income Introduction to WRDS Investments Macroeconomics SEC Text Analytics



Getting Started

This teaching tool guides your students through their first use of the WRDS website. With it, you can:

- Introduce new users to WRDS
- Provide an overview of how queries are organized
- Demonstrate a sample query to retrieve pricing data

More »



What Data is in WRDS?

Learn about WRDS' data offerings and how to navigate them effectively. Acquaint students with the breadth of data sets in WRDS, including:

- Financial
- Economic
- Marketing
- Public

More »



Finding the Data You Want

WRDS contains a tremendous variety of data. This exercise covers the following:

- How data is categorized
- Techniques to locate data
- Resources that index WRDS' data

More »



Understanding Identifiers

This exercise describes the major descriptors used to identify both companies and securities in WRDS, along with examples of each. Students will be introduced to the following:

- Difference between header and historical identifiers
- Issues vs. companies
- Dates of applicability

More »



Identifiers: Tracking Companies

How do we account for changing company names, tickers, mergers, acquisitions, and bankruptcies in various datasets? Students will learn about:

- Company identifiers in 6 finance and accounting datasets
- Which company identifiers change and which stay the same



Using the CRSP/Compustat Merged (CCM) Database

The CRSP/Compustat Merged database provides a convenient way to link CRSP market data with Compustat fundamentals.

- Navigate challenges to linking CRSP and Compustat data
- Use a web query to access Compustat data using CRSP's PERMNO/PERMCO



Using the IBES CRSP Linking Table

Researchers can easily merge IBES estimates with CRSP stock return data using a proprietary linking table that matches entities between the two. Researchers will learn:

- The methodology behind the IBES CRSP Linking Table
- How to run a web query to match CRSP PERMNOs with IBES Tickers



Using SAS Studio

SAS Studio is a revolutionary tool which gives students the power of interactive SAS, but within a browser window. With this teaching tool students will:

- Launch SAS studio from the WRDS web interface
- Write and read a basic data step in SAS Studio
- Export a table in SAS Studio

Research tab

Applications, macros, research guides, and sample programs to assist you in replicating well-known empirical papers and can serve as a starting point in your own original research.

WRDS Research

The WRDS Research page is intended to help you get started with your research using WRDS data. The WRDS Research Applications, SAS macros, research guides, and sample programs will assist you in replicating well-known empirical papers and can serve as a starting point in your own original research.

Introduction

The WRDS research page is meant for all levels of users: new users can start with the SAS programming tips and sample programs for a database of interest, while research applications and SAS macros are geared more toward experienced researchers as they are based on more advanced empirical concepts and SAS features. They can be used, for example, to build accurate historical links between different data sources, to process large datasets or replicate some widely cited research papers.

While we make our best effort to provide high quality applications, we recognize that there is always room for improvement, especially given continuous change in data needs and reporting environments. We appreciate any feedback on existing research tools and welcome suggestions on future potential research-related additions.

[Top of Section](#)

Research Applications

To improve efficiency and quality of empirical research, WRDS replicated widely-cited papers that represent various areas of research. As transparent and ready-to-use algorithms, such applications cover a variety of topics from portfolio construction, earnings surprise calculation, institutional ownership ratios to deriving NBBO, signing trades, and option pricing. These sample source codes offer users the flexibility to customize them to address their specific research needs.

Research Applications

[Top of Section](#)

Table of Contents

- » [Introduction](#)
- » [Research Applications](#)
- » [Research Macros](#)
- » [Research Guides](#)
- » [WRDS Data Overviews](#)
- » [Sample Programs](#)
- » [SAS Notes](#)

Support tab

Learn about the available data sets at WRDS, how to access them remotely or on our WRDS Cloud high performance computing cluster, and how to use our data in your research.

Support

Welcome to the WRDS Support Section. Learn about the available data sets at WRDS, how to access them remotely or on our WRDS Cloud high performance computing cluster, and how to use our data in your research.

Getting Started

» [Ways to use WRDS](#)

» [Account Types](#)

» [Library & Lab Access](#)

» [Terms of Use](#)

[More Getting Started resources](#) ↗

The WRDS Cloud

» [Introduction to the WRDS Cloud](#)

» [Using SSH to Connect to the WRDS Cloud](#)

» [Programming Languages](#)

» [Running Jobs](#)

[More The WRDS Cloud resources](#) ↗

Sample Programs

» [Comscore](#)

» [Compustat](#)

» [CRSP](#)

» [CSMAR](#)

[More Sample Programs resources](#) ↗

Data at WRDS

» [Dataset List](#)

» [Manuals and Overviews](#)

» [Data Update Calendar](#)

» [Variable Search](#)

Research Applications

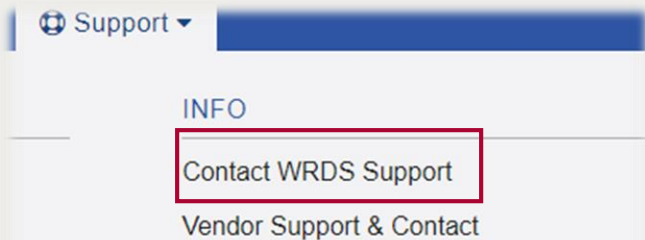
» [Portfolio Construction and Market Anomalies](#)

» [Python Replications](#)

» [Event Studies](#)

» [Linking Databases](#)

Professional Research and Technical Support to assist our users with any difficulties including reviewing their programs, locating the right data for a particular research problem, and answering any other questions. Clicking the Support tab and 'contact WRDS Support' users will receive a response in less than 24h.



THANK YOU!

A large blue sign for Wharton University of Pennsylvania. The sign features the university's crest on the left, which includes a shield with a book and a ship, and the text 'Wharton' in a large serif font, with 'UNIVERSITY of PENNSYLVANIA' in a smaller sans-serif font below it. The sign is set against a background of palm trees and a suspension bridge.

Wharton
UNIVERSITY of PENNSYLVANIA



Wharton
UNIVERSITY *of* PENNSYLVANIA

The Global Standard for Business Research

wrds