Wharton Research Data Services (WRDS)

Note: Databases on WRDS can be accessed by requesting an account on the WRDS website (http://wrds.wharton.upenn.edu).

**Standard & Poor's Compustat North America** is a database of financial, statistical, and marketing information. It provides more than 300 annual and 100 quarterly Income Statement, Balance Sheet, Statement of Cash Flows, and supplemental data items on more than 24,000 publicly held companies.

Compustat files are available in both annual and quarterly formats. The industrial annual formats offer both historical and restated data. The industrial quarterly formats offer restated data as reported by the company. The restated data allows analysts to compare current and prior years' results on a comparable basis and determine financial trends and growth rates. For most companies, annual and quarterly data is available for a maximum of 20 years and 48 quarters.

Compustat North America files also contain information on aggregates, industry segments, banks, market prices, dividends, and earnings. For more detailed information on the Compustat files, consult the Compustat User's Guide.

**Standard & Poor's ExecuComp** is a unique database for executive compensation analyses. The ExecuComp report library accesses more than 100 up-to-date compensation and financial items for over 2,500 companies (over 24,000 executives).

**The Center for Research in Security Prices (CRSP)** maintains the most comprehensive collection of standard and derived security data available for the NYSE, AMEX and Nasdaq Stock Market. CRSP is a research center at the University of Chicago Graduate School of Business, and maintains historical data spanning from December 1925 to the present. CRSP's trademark of unique issue identifiers tracks a continuous history of securities, providing a seamless time-series examination of the issue's history. CRSP's unparalleled accuracy and dedication to excellence has made CRSP data a staple of academic and commercial research and data analysis throughout the world.

The CRSP US Government Bond File is available in two frequencies: daily and monthly. The daily product contains data for about 3,100 marketable US Government securities traded in the secondary market and during the issued trading period from June 14, 1961 to the present. The monthly product contains data for approximately 5,000 bonds, notes, and bills since 1925. Additional CRSP files contain information on stock summaries (indices), treasury bills, maturity portfolios, fama-bliss discount bonds, Risk Free rates, cap based portfolios, S&P 500, and bond, bills, and inflation.

**I/B/E/S International Inc.** provides timely analyst information on over 18,000 companies in more than 60 countries – more than any other source. In addition, I/B/E/S provides a collection of firms’ forecast measures for accounting information. Data terms, such as earnings estimate per share, revenue, net income, and pre-tax profit, are included in forecast measures. The I/B/E/S database is useful for researchers who are interested in analyst forecast information, such as researchers documenting market effects of missing earnings expectations.

**Eventus** performs event studies using data read directly from CRSP stock databases or pre-extracted from any source. The Eventus system includes utility programs to convert calendar dates to CRSP trading day numbers, convert CUSIP identifiers to CRSP permanent identification numbers, and extract event study cumulative or compounded abnormal returns for cross-sectional analysis.
Eventus provides user control over estimation periods and cumulative return windows, a choice of raw, comparison period mean adjusted, market adjusted or market model abnormal returns. Simple statements allow the researcher to run a complete event study, from reading the CRSP stock database to print results, with a program as short of as four lines.

The **Institute for the Study of Security Markets (ISSM)** database contains tick-by-tick data covering the NYSE and AMEX between 1983 and 1992, and NASDAQ between 1987 and 1992. Each year of data is divided into two files, one for trades and one for quotes.

The **Trade and Quote (TAQ)** database contains intraday transactions data (trades and quotes) for all securities listed on the New York Stock Exchange (NYSE) and American Stock Exchange (AMEX), as well as Nasdaq National Market System (NMS) and SmallCap issues.

The **TFN Insider Filing Data** captures all insider trading activity as reported on SEC Forms 3, 4, 5, and 144 during 1986-2006. Corporate insiders are defined broadly to include those that have “access to non-public, material, insider information” and these insiders are required to file SEC Form 3, 4, and 5 when they trade in their company’s stock.

**Online Access**

Note: Contact Karl Muller ([kam23@psu.edu](mailto:kam23@psu.edu)) for access information.

**Datastream International** provides financial statement, daily pricing and volume information on over 37,000 equities from 57 countries, 70,000 domestic and international bonds and related instruments, 12,000 market stock and bond indices, 87,000 macroeconomic series from the International Financial Statistics of the World Bank, OECD and other central statistical offices, over 2,000 daily foreign exchange rates, 1,000 daily and weekly interest rate series, 68,000 fixed income instruments from 23 countries and more than 260 financial and commodity futures and options contracts.

Datastream provides an extensive historical financial database offering global coverage of:

- Equities (including financial statement information)
- Bonds
- Derivatives
- Stock market indexes
- Commodities
- Warrants
- Interest an exchange rates
- Macroeconomic indicators

Datastream draws on a variety of resources that includes the national statistical agencies, central banks, international organizations, as well as consulting companies and research institutes. Depending on the type of series, data is available on a daily, weekly, monthly or annual basis. Historical coverage depends on the type of series and the country; some series start as early as 1950.

**SDC Platinum**, as the world’s foremost financial transactions database, is the source for the most thorough and accurate account of the entire global financial marketplace. This is a web-based system that requires software, which can be downloaded by Penn State users from a Penn State computer. You can download

Smeal Unix Server Access

Thomson/CDF Spectrum Institutional Ownership
The Spectrum Database is available on the server unix.smeal.psu.edu. This database offers quarterly reports of institutional holdings of stocks. Penn State has data available for the 1979-2002 period. Variables of interest include CUSIP, Stock Name, Ticker, End of Quarter Shares Outstanding, End of Quarter Price, and Manager Number. You must be familiar with unix and SAS to access these data. See Gary Field for an account on unix (note: allow one week’s notice for account activation).

Available in the Smeal Trading Room, 1st Floor, Business Building
Note: See http://www.smeal.psu.edu/traderoom/ for the latest information.

Bloomberg Professional is an interactive information network that allows users to find virtually any financial information that they desire. It has been coined by Trading Room interns as "the Ferrari of information networks." It provides extremely in-depth financial data for all types of securities. For instance, students can delve into products like mortgage-backed securities and find information regarding their composition. Furthermore, it gives students and faculty the ability to perform in-depth analysis such as correlation analysis, theoretical pricing models, and potential arbitrage pricing discrepancies on various financial products. Bloomberg easily facilitates the monitoring of different global financial market data and news and provides a vast array of current and historical financial statement data. Detailed information on risk analysis and financial solvency can also be found for most securities. The Penn State Trading Room houses two Bloomberg machines, one of which can be used to download financial data.

Reuters Station is available on any desktop in the Trading Room, and is used as a monitor for all the different global markets, from equities to currencies to international bonds. Users can set up several different "workspaces," each of which contains user-selected analytics screens such as news monitors, charts, and data monitors. The user can easily switch between the screens, meaning a large amount of data is available to a user. Reuters Station's charting tool, Athena, is very powerful and enables the performance of detailed technical analysis.

TradeStation Pro is a direct-access trading platform. It provides quick and easy access to real-time NASDAQ level 2 quotes and specialists' posted prices. Charting is quickly performed, and adding technical analysis to a graph takes only seconds. As easy as TradeStation Pro is to use, it provides users with extremely powerful tools to develop trading strategies and back test them. TradeStation Pro also allows data exportation into Excel.

The Financial Trading System (FTS), developed by John O'Brien at Carnegie Mellon University, allows teachers and students to run real-time trading "cases" that teach specific concepts and strategies. Teachers
can also modify some of the setting for preconstructed cases to adapt them to their class, allowing them to tailor the cases for certain lectures or class material. In addition, FTS provides a platform for multiple universities to run trading simulations together, having several hundred students trading at once. During trading, the FTS software allows market participants to post a bid and ask price (market maker) or be a price taker from the other market participants. In many of these simulations, it is up to the trading crowd to discover the actual prices for the case they are working on. FTS is the platform used for the Penn State Global Trading Competition.

Available on the web on a Penn State Computer or by using a Penn State login id off campus:

Note: Obtain access through the E-Resource List (A-Z) at http://www.libraries.psu.edu

**Factiva**

Factiva can be assessed through the Penn State Library website. Factiva provides news stories from 50 different sources, including the *Wall Street Journal*. Factiva also provides financial information and market information specific to particular companies or industries.

**Lexis-Nexis Academic Universe**

Lexis-Nexis can be assessed through the Penn State Library website. LexisNexis has 31,000 journals and newspapers that can quickly be searched for keywords such as company names. The service does not concentrate on academic journals, but rather on journals read outside of academia. The journals contained span an enormous range of subjects, including, but not limited to, business, legal, medical and general news. Lexis-Nexis also provides an efficient listing of all SEC EDGAR filings.