THOMSON REUTERS MARKETS ACADEMY

Discover the Essential tools in Datastream

Knowledge Network
AIM — you will get to know…

- Searching for codes with using the Datastream Navigator
- Retrieving Data in Datastream AFO
- Retrieving and managing data efficiently on Excel
- Charting capability on Datastream
- Support Tools
AGENDA

- What is Datastream?
- Datastream Navigator
- Datastream Advance for Office (Excel Add-in)
  - Static Request
  - Time Series Request
  - Create List
  - Request Table
- Datastream Charting
- Extranet – AFO sample sheets
- Knowledge Network training website
What is Datastream?

• **Data**: Financial / Economic Database of Global Coverage
  - Historical data since 1950’s, over 330 million time series
  - Largest Global Macroeconomic Database
  - Reliable estimates

• **Application**: Extended features on desktop & MS Office
  - Datastream Advance (Datastream Desktop)
    Easy-to-use, pre-formatted charts and tabular reports with flexible charting
  - **Advance for Office (AFO)**
    Build complex models and reports, data & charts can be linked in Excel, PowerPoint or Word to enable to create spreadsheets, presentations & documents
Total number of time series: **over 330 million**

Total number of datatypes: **over 16,000**

Total number of instruments / indicators: **over 11 million**


- Macro Forecasts- **over 400 concepts** from the OECD and Consensus Economics. Consumer and business confidence surveys and expectations from 125 sources.

- Economics Point In Time- **As Reported Economics- G7 Markets**, 10 years history → extend to G20

- Equities – **98,500 live equity and 220,000 dead with extensive history to the 1960’s**

- I/B/E/S Estimates – analyst forecasts via 30 measures for some 22,000 active companies and 21,000 dead.

- I/B/E/S Global Aggregates – provide earnings forecasts on a **Market, Region, Industry and Sector level**.
CONTENT COVERAGE - 2

• Fundamentals – Over 1,800 data items; 45,000 active Worldscope companies and 25,000 dead.

• Equity indices - 315,000 equity indices series, national sources, MSCI, DJ, FTSE, S&P and DS. Index constituents and sector aggregates detail with history back to 1960’s.

• Fixed Income Securities (Bonds) - 276,000 active government and corporate bond issues across 31 markets. 500,000+ matured and called government and corporate bond issues.

• Global Exchange Rates – WMR, Tenfore, GTIS, Tullett Prebon, ECB and National Sources
Commodities and Energy – More than 100,000 series including Platts, Metal Bulletin, ICIS and Goldman Sachs.

Futures – covering 61 regulated exchanges across 36 countries covering over 2400 active contracts and over 200,000 series in total.

Options – coverage of 2,955 active contracts with over 995,000 live series and 3.7 million expired series across 25 different countries.

Warrants – coverage consists of 235,000 active series with 1.4 million expired series across 28 countries.

Funds & Trusts – 235,000 funds, including 30,000 UK trusts. Complete coverage of UK investment trusts. Lipper integration forthcoming.

The Navigator provides different levels of searching enabling to find and select series as effectively as possible through the Free Text Search, Advanced Search or Explorer.
Datastream Navigator – Free Text Search
Datastream Navigator - Explorer
Datastream Navigator - Metadata Display
**Datastream Navigator**

**Data Category:** Equities

<table>
<thead>
<tr>
<th>Name</th>
<th>DS Mnemonic</th>
<th>RS Code</th>
<th>Market</th>
<th>Base Date</th>
<th>Currency</th>
<th>IBES</th>
<th>MSCI</th>
<th>WS</th>
<th>Primary</th>
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<td>Euro</td>
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<td>No</td>
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<td>No</td>
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<td>United States Dollar</td>
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<td>No</td>
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<td>Feb 17 1998</td>
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<td>United States Dollar</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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</tbody>
</table>

**Notes:**
- **Corresponding Codes required to retrieve data for that company**
- **Base Date shows how far back the data goes for that company**
- **Tells you if there are estimates from IBES**
Retrieving Data in AFO

Datastream AFO interface

When Datastream is installed you will see in the menu bar Datastream as an option.

This will give you access to the menu on the right to access data series where you can make Static, Time Series and Company Account Request.
Retrieving Data in AFO

**Static requests:** To request data for a specific date. For example, the price, PE and dividend yield for stocks for 01/01/05.

**Time series requests:** To request data over a specific period, defined by a start date, end date, and frequency of data. For example, the daily price for Pepsico from 01/01/05 to 01/01/06.
Datastream Time Series Request

Click Find Series to display Datastream Navigator, then select series from result list to be displayed in Series/List field.

Click Datatypes to display Datastream Navigator, then select series from result list to be displayed in Series/List field.
Datastream Time Series Request

A **Frequency** format option enables you to define periodicity of the data required.

**Options** allow you to format the results. Note: **Auto Refresh** allows the sheet to be refreshed automatically each time it is opened.

**Embed** allow to edit/refresh data afterward.
Exercise 1 – Static Request

• List the underlying companies of ASX 200 index with company names, ISIN and Last (Close) Price.

Hint
• List Code: LASX200I
• Datatypes: NAME, ISIN, P
Exercise 2 - Time Series Request

• Compare the share price, market capitalisation (market value) and PE for a list of companies (2 year history) below.

  – CBA (Australia)
  – NAB (Australia)
  – Westpac (Australia)
  – HSBC (Hong Kong)
  – Standard Chartered (UK)

• Try to convert all data to US dollar
Exercise 3 - Time Series Request

• Compare the index price (PI) of indices (2 year history) below.
  – ASX 200 (Australia)
  – Hang Seng Index (Hong Kong)
  – FTSE 100 (UK)
  – Nikkei 225 (Japan)
  – SP 500 Composite (US)

• Try to change the data for rebasing (=100) as base date is the start of the data.
Exercise 4 - Time Series Request

- For the countries below, list 10 year benchmark bond yield for last year.

  - Australia
  - US
  - Italy
  - Germany
  - UK

Hint: Find data is in “Economics” or “Interest rates” category in Navigator
Exercise 5 - Time Series Request

For the countries below, list GDP (Actual, Seasonally Adjusted) since Q1 2005.

- Australia
- US
- Japan
- Italy
- France
- UK

Hint: xxxxx…D indicates Actual, Seasonally Adjusted
Exercise 6 – Create own request table

- Download BHP’s static & Historical data

Task

- Row 1 – static
- Row 2 - historical
Exercise 6 – Screen shot

<table>
<thead>
<tr>
<th>Update</th>
<th>Request Type</th>
<th>Format</th>
<th>Series Lookup</th>
<th>Dtype Types</th>
<th>Start Date</th>
<th>End Date</th>
<th>Freq</th>
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<tbody>
<tr>
<td>YES</td>
<td>S</td>
<td>RCT</td>
<td>A.EHPX</td>
<td>sin, loc, secd, dy, eps, mv, mvc, mne, p</td>
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<td></td>
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<tr>
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<td>S</td>
<td>RCT</td>
<td>a.brhpx</td>
<td>sin, loc, secd, dy, eps, mv, mvc, mne, p</td>
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</tr>
<tr>
<td>YES</td>
<td>TS</td>
<td>RC</td>
<td>a.brhpx</td>
<td>p</td>
<td>-2y</td>
<td>daily</td>
<td></td>
</tr>
</tbody>
</table>

DATASTREAM

Request Table 5.1

On Open: Process Table
Pre-Request Macro: Always Return Currency
On Completion Macro: Screen Refresh/Auto-Calc Off
On Completion: Display Details
Scheduled Update at: Refresh Charts
Refresh Chart Templates
Tips for Constituent List search in Navigator

<table>
<thead>
<tr>
<th>Equity Lists</th>
<th>HELP HELP?</th>
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<td><strong>United Kingdom</strong></td>
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</tr>
<tr>
<td>1 UK Equity Lists</td>
<td></td>
</tr>
<tr>
<td>2 Investment Trusts</td>
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</tr>
<tr>
<td>3 Africa</td>
<td></td>
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</tr>
<tr>
<td>11 Company Accounts Lists-All Areas</td>
<td></td>
</tr>
<tr>
<td>12 T/B/E/S Coverage</td>
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</tr>
<tr>
<td>13 MSCI Constituent Lists</td>
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</tr>
<tr>
<td>14 FTSE World Indices</td>
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<td>15 FTSE Tradable</td>
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<td>16 S&amp;P International Indices</td>
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</tr>
<tr>
<td>17 Historical Constituent Lists</td>
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<td>18 S&amp;P International Indices</td>
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<tr>
<td>19 Weights-Overview A-F</td>
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<td>20 Historical Constituent Lists</td>
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<td>21 Default Indices</td>
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<td>22 Weights-Overview G-N</td>
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</tr>
<tr>
<td>23 Discontinued Lists</td>
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</tr>
<tr>
<td>24 Worldscope: Country Lists</td>
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</tr>
</tbody>
</table>

Double click on number to goto next.
Exercise 7 – Create own request table

• Download static & historical data of my own Australian material company portfolio.

Task
• Create own portfolio list.
• Open request table
• Download static data for portfolio
  • static Data types: ISIN, LOC, SECD, DY, MV, MNEM, NAME, P and price change for 1M, 6M
• Time series Data: P
• Time series data for 5 years monthly basis.
• Time series data Top 10 performer of last 1 month.
Exercise 7 - Steps

• static – Codes, Name & GICS → Sort Materials

• Create your list – Create list (from range)

• Request table
  • Row 1 static request – data to sheet1
  • Row 2 Time series – data to sheet2
  • Row 3 list
  • Row 4 Time series
### Exercise 7 - screen shot

<table>
<thead>
<tr>
<th>Update</th>
<th>Request Type</th>
<th>Format</th>
<th>Series Lookup</th>
<th>Datatype/Expressions/CAF/Search Lookup</th>
<th>Start Date</th>
<th>End Date</th>
<th>Fix</th>
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<tr>
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<td>S</td>
<td>RC</td>
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<td>name.mnem.p.pch#(x, 1m), pch#(x, 12m)</td>
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<td></td>
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<tr>
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<td>P</td>
<td>-1Y</td>
<td>daily</td>
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<th>Datatype/Expressions/CAF/Search Lookup</th>
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<tr>
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Exercise 8  - Econ data retrieval in Request table

• Create your own Key Australian Economic data request table

Task
• Request table
• Narrow down Quarterly basis Economic data in Navigator
• Raw data & Q/Q
Exercise 8 - Screen shot
### Exercise 8 - Screen shot using LIST request

**Datastream Process Table**

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<thead>
<tr>
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</table>
Exercise 9 - Individual company data

- **World scope**
  - Extranet home – Worldscope - (scroll down to bottom) Guides and other useful Documents
    - 4 category
    - Sample sheet
      - Balance sheet
      - Cash flow statement
      - Profit and Loss
      - Peer Comparison

- **IBES data**
  - Extranet home – I/B/E/S consensus –(scroll down to bottom) Guides and other useful documents
    - Estimates
    - Aggregate data
Accessing Datastream Charting

[Image of the Datastream Charting interface]

- Series Search
- Data Category: Economics
- Search for "australia unemployment"
- Results for "australia unemployment"
Datastream Charting page
Quick access - Key Indicators and Library
Charting Exercise 1

- Create a chart to compare the unemployment rates for Australia, Greece, US and Spain for the last 5 years.
Charting Exercise 2

• **Bar chart** - library-Datastream-Charting features-Stacked or Static Bar

• **Scatter chart** - library-Datastream-Charting features- Static or Time series Scatter

• **Quick Correlation** – Lead & Lag – best fit

• **Correlation and expressions**
Datastream Extranet is a website that contains extensive product-related information and assists tools such as prebuilt AFO samplesheet.
Datastream Certification -
https://training.thomsonreuters.com/cert/datastream/

PRODUCT CERTIFICATION

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VIEW TRAINING MODULES
Use the training resources to prepare for the exam:
- Thomson Reuters Eikon
- Reuters 3000 Xtra
- Datastream

REQUEST EXAM TOKEN
- Request a token by entering your name and email address
- The exam token is valid for 1 week

TAKE THE TEST
- You have 60 minutes to answer 30 multiple choice questions
- You can use your product during the exam
- 2 attempts at the exam
- Get your result instantly
Help & Support

Thomson Reuters Support (Australia)

• Phone: 1800 634 264
• Email: Go to Datastream menu → Contact Us

English is supported 24/5
Thank you for attending!