REUTERS/Carlos Barria

THOMSON REUTERS MARKETS ACADEMY

Discover the Essential tools in Datastream

Knowledge Network

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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

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What is Datastream?

- **Data** : Financial / Economic Database of Global Coverage
  - Historical data since1950'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

CONTENT COVERAGE - 1

Total number of time series: over 330 million

Total number of datatypes: over 16,000

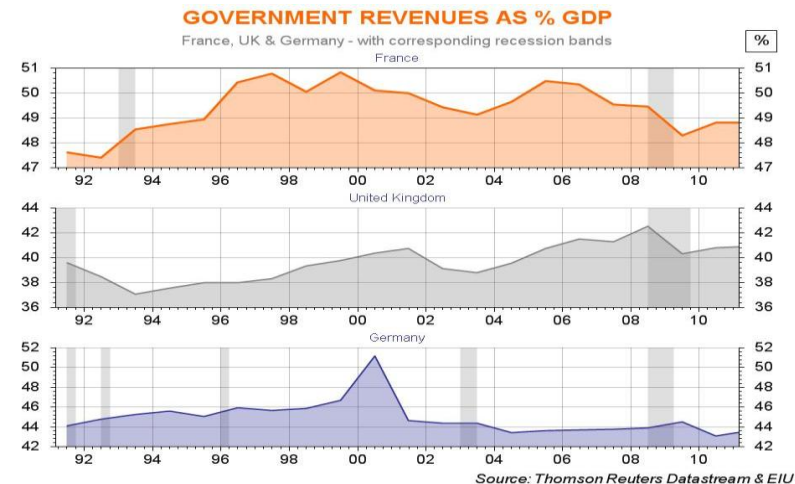**Total number of instruments / indicators: over 11 million**

- Economics **– over 3 million economic time series covering 118 markets from national sources and international agencies. Histories back to 1950's for G7, 1970's for major markets, 1980's for emerging markets.**

- 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**.

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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**

GOVERNMENT REVENUES AS % GDP
France, UK & Germany - with corresponding recession bands

Source: Thomson Reuters Datastream & EIU

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CONTENT COVERAGE - 3

- 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.**

- **Unique Content- Proprietary Equity & Bond Indices, CDS sector indices, Fitch PD series, M&A indices and valuation ratios**

Datastream Navigator

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

Search Result from Datastream Navigator

Datastream Navigator

THOMSON DATASTREAM NAVIGATOR   Series Search   UCI Create/Modify   UCTS   Help Browse   Interactive Charting

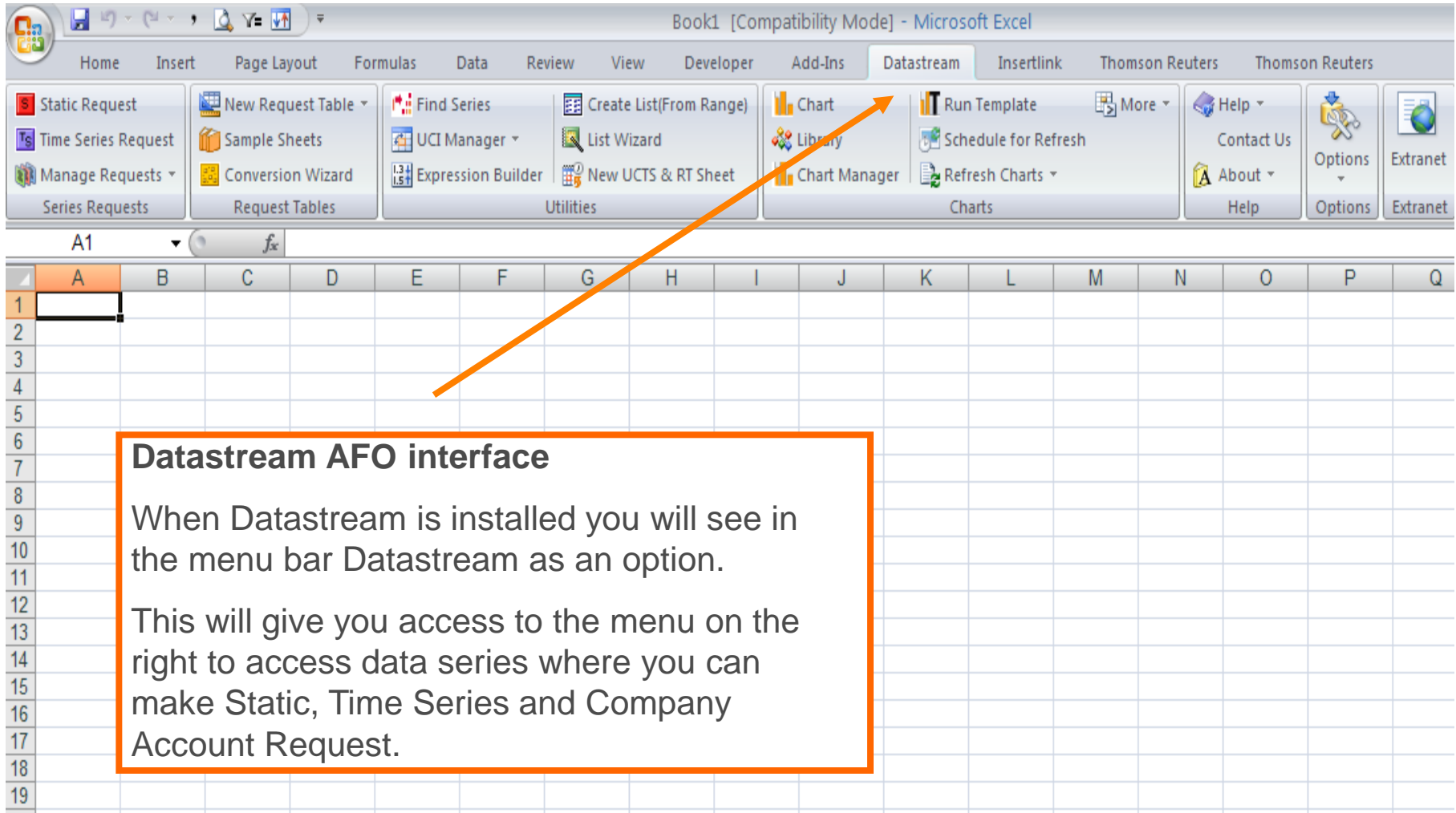**Data Category:** ⓘ **Equities** ▶

Set Criteria   **Retrieve Results**   **Explorer** | Displaye

Name ▲▼◆	DS Mnemonic ▲▼	DS Code ▲▼	Market ▲▼	Base Date ▲▼	Currency ▲▼	IBES ▲▼	MSCI ▲▼	WS ▲▼	Primary
COCA COLA ▶	U:KO	904282	United States	Jan 2 1973	United States Dollar	Yes	Yes	Yes	Yes
COCA COLA (FRA) ▶	D:CCC3	951259	United States	Sep 26 1988	Euro	No	No	Yes	No
COCA COLA (LIM) ▶	PE:KO	274630	United States	Aug 10 1999	United States Dollar	No	No	Yes	No
COCA COLA BT.CONS. ▶	@COKE	906847	United States	Jan 2 1973	United States Dollar	Yes	Yes	Yes	Yes
COCA COLA BT.CONS. (FRA) ▶	D:CC5	14477R	United States	Aug 31 2001	Euro	No	No	Yes	No
COCA COLA BT.CONS. (XET) ▶	D:CC5X	14496F	United States	Feb 19 2002	Euro	No	No	Yes	No
COCA COLA CERT. (SWX) ▶	S:KO	982123	United States	Jul 16 1990	Swiss Franc	No	No	Yes	No
COCA COLA ENTS. ▶	U:CCE	741521	United States	Nov 21 1986	United States Dollar	Yes	Yes	Yes	Yes
COCA COLA ENTS. (FRA) ▶	D:COX	13404J	United States	Jan 11 2001	Euro	No	No	Yes	No
COCA COLA ENTS. (XET) ▶	D:COXX	14509C	United States	Oct 26 2004	Euro	No	No	Yes	No
COCA COLA HELLENIC (OTC) ▶	@CCHOF	15256V	Greece	Apr 17 2001	United States Dollar	No	No	No	No
COCA COLA HELLENIC CDI. ▶	A:CHBX	263855	Greece	Sep 1 2000	Australian Dollar	No	No	No	Yes
COCA COLA HLC.BT. (XET) ▶	D:CCKX	14612R	Greece	Jun 4 2002	Euro	No	No	Yes	No
COCA COLA ICECEK ▶	TK:COC	35912K	Turkey	May 11 2006	Turkish Lira	Yes	Yes	Yes	Yes
COCA COLA ICECEK GDR (REG S) ▶	CICE	676216	Turkey	Feb 17 1998	United States Dollar	No	No	No	Yes
PANAMA COCA COLA BT. ▶	@PCOK	26625H	United States	May 21 2002	United States Dollar	No	No	No	Yes

Corresponding Codes required to retrieve data for that company

Base Date shows how far back the data goes for that company

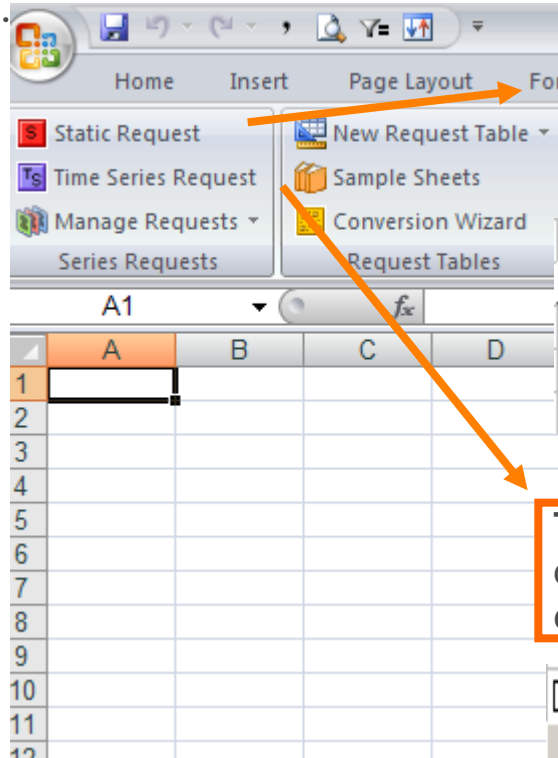Tells you if there are estimates from IBES

12

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

DS trigger				
Refresh	12/31/2004			
Type	P	PE	DY	CURRENCY
U:PEP	52.2	21.9	1.76	U$
U:KO	41.64	22.1	2.4	U$

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

DS trigger							
Refresh	12/31/2004						
End	12/30/2005						
Frequency	D						
Name	Code	CURRENCY	12/31/2004	1/3/2005	1/4/2005	1/5/2005	
PEPSICO	U:PEP(P)	U$	52.2	51.94	51.57	51.63	

Datastream Time Series Request

Time Series Request

Request Details

Series/Lists: AUCONPRCF,CHCONPRCF,FNCONPR...

☐ Display Data As MSChart
☐ TS for each item in list

Datatypes/Expressions f_x PI

PAD#
PAD#
PCH#
PCH#

Find Series

Datatypes

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 Navigator

THOMSON DATASTREAM NAVIGATOR Datatype Search Interactive Charting

Data Category: Equities

Find Name ▼ Contains ▼ Market Value And ▼ Name ▼ Contains ▼

Datatype ⦿ All ○ Static ○ Time Series Key WS Item ⦿ All ○ No ○ Yes Worldscope Level ⦿ All ○ Company ○ Security

	Name	Mnemonic	Worldscope
▣ All			
► Key Datatypes	FTSE Market Value In US (Excludes Weighting Factor)	FTSMVUSU	
► Datastream	FTSE Market Value In US (Includes Weighting Factor)	FTSMVUSD	
► FTSE AW	FTSE Market Value In US After Applying The Growth Factor	FTSMVUSG	
► GICS Direct	FTSE Market Value In US After Applying The Value Factor	FTSMVUSV	
⊞ IBES	FTSE Market Value-Local Currency	FTSMV	
► MSCI	Market Value (Capital)	MV	

Help Default Options Submit Cancel

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 <u>company names , ISIN </u>and <u>Last (Close) Price</u>.

  Hint
    - List Code: LASX200I
    - Datatypes: NAME,ISIN,P

Exercise 2 - Time Series Request

- Compare the <u>share price</u>, <u>market capitalisation (market value)</u> and <u>PE</u> 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 <u>index price (PI)</u> 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.

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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

Update										Request Type	Format		Series Lookup			Datatype/Expressions/CAF/Search Lookup				Start Date	End Date	Freq
Y	Y/N	N	S	TS	TSL	CAF	CH	SCH	L		Select Format	Find Series			Datatypes	fx						Daily
	YES		S								RCT	A:BHPX			ISIN,LOC,SECD,DY,EPS,MV,MVC,MNEM,P							

THOMSON REUTERS **DATASTREAM** Request Table 5.1
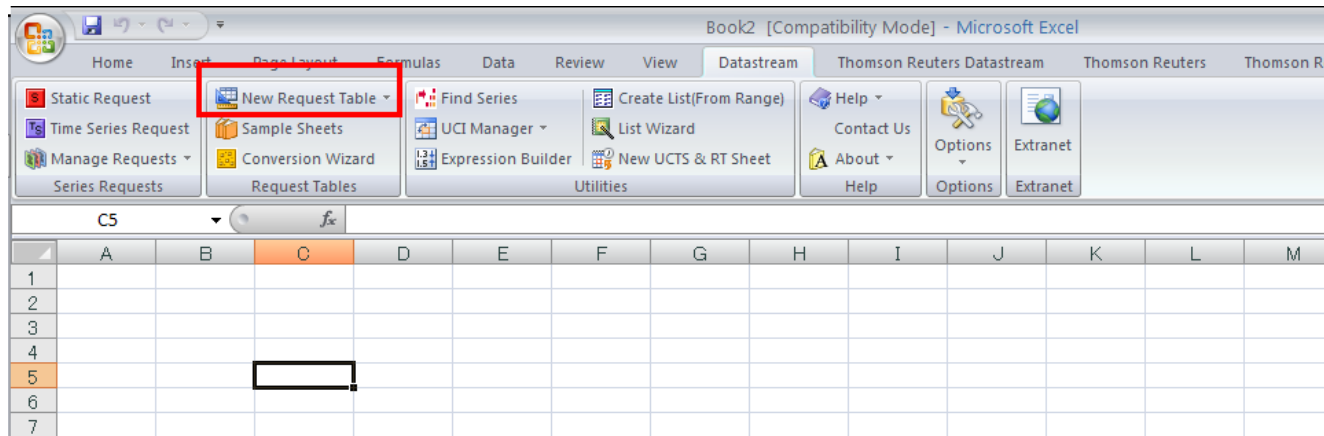
On Open — Process Table
Pre-Request Macro:
On Completion Macro:
On Completion: — Refresh Charts, Refresh Chart Templates
Always Return Currency
ScreenRefresh/Auto-calc Off
☑ Display Details
Scheduled Update at:

Process Table Add to Index Schedule Options Help Find Series
Press Ctrl + R to Process Table

	Update										Request Type	Format		Series Lookup			Datatype/Expressions/CAF/Search Lookup				Start Date	End Date	Fre
5	Y	Y/N	N	S	TS	TSL	CAF	CH	SCH	L		Select Format	Find Series			Datatypes	fx						Daily
7		NO		S								RCT	a:bhpx			isin,loc,secd,dy,eps,mv,mvc,mnem,p							
8		YES			TS							RC	a:bhpx			p					-2y		daily

Tips for Constituent List search in Navigator

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

| Process Table | Add to Index | Schedule | Options | Help | Find Series | ☰ | On Completion: | ☐ Refresh Charts | Scheduled Update at: | |
| Press Ctrl + R to Process Table | | | | | | | | ☐ Refresh Chart Templates | | |

Update			Request Type						Format		Series Lookup			Datatype/Expressions/CAF/Search Lookup				Start Date	End Date	Fr
Y	Y/N	N	S	TS	TSL	CAF	CH	SCH	L	Select Format	Find Series	🔍	▦	Datatypes	fx	CAF	SCH🔍			Daily
	NO			S						RC	BankANew_0000.LLT			name,mnem,p,pch#(x,1m),pch#(x,12m)						
	YES			TS						RC	=E7			P				-1Y		daily

On Completion Macro:

| Process Table | Add to Index | Schedule | Options | Help | Find Series | ☰ | On Completion: | ☐ Refresh Charts | Scheduled Update at: | |
| Press Ctrl + R to Process Table | | | | | | | | ☐ Refresh Chart Templates | | |

Update			Request Type						Format		Series Lookup			Datatype/Expressions/CAF/Search Lookup				Start Date	End Date	
Y	Y/N	N	S	TS	TSL	CAF	CH	SCH	L	Select Format	Find Series	🔍	▦	Datatypes	fx	CAF	SCH🔍			Dail
	NO			S						RC	BankANew_0000.LLT			name,mnem,p,pch#(x,1m),pch#(x,12m)						
	NO			TS						RC	=E7			P				-1Y		daily
	NO								L		stats!$D$4:$D$15,L#G53293,V									
	YES				TSL					RC	L#G53293			p				-3Y		weel

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

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Exercise 8 - Screen shot

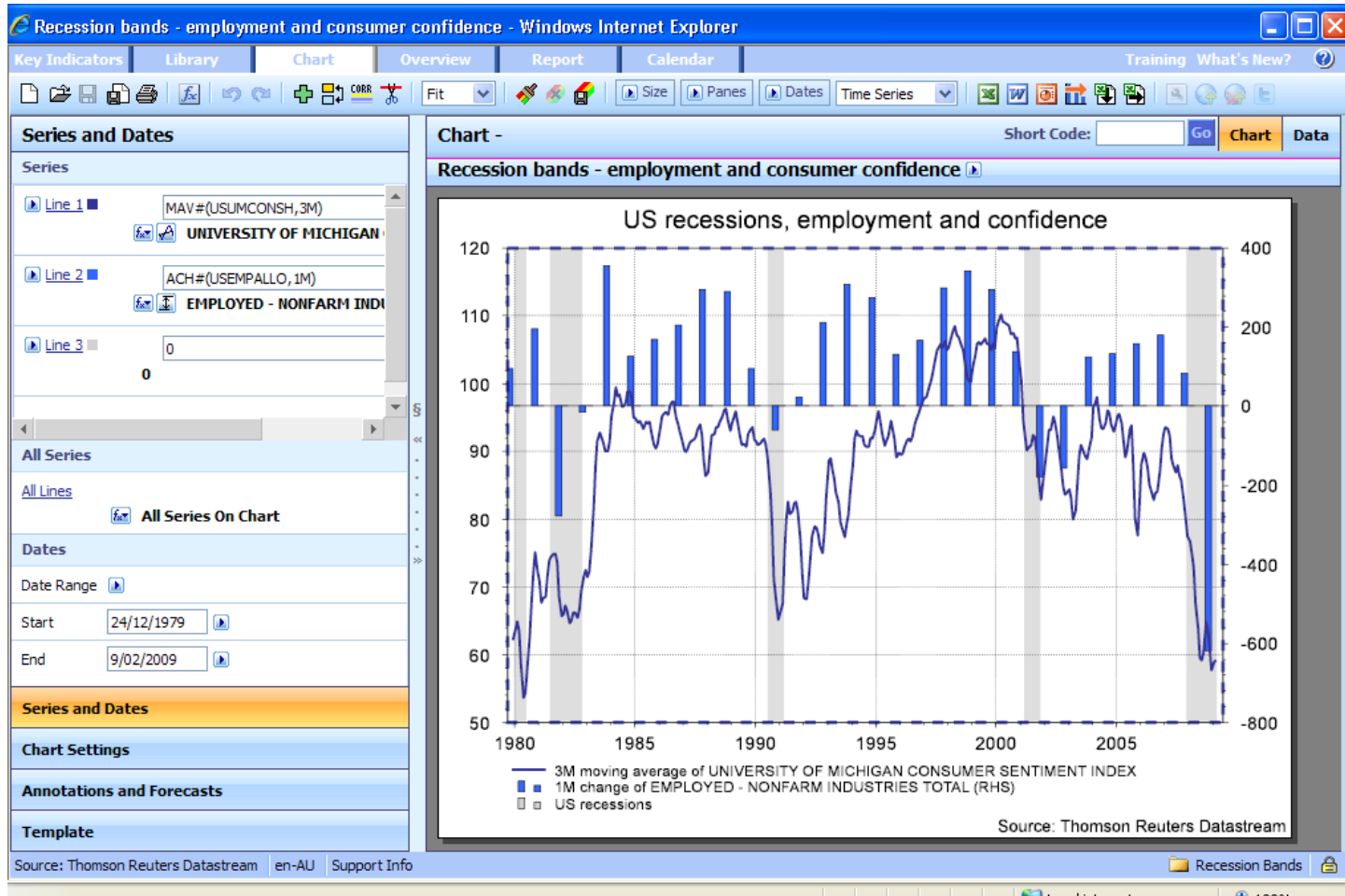# Exercise 8 - Screen shot using LIST request

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

Datastream Charting page

Quick access - Key Indicators and Library
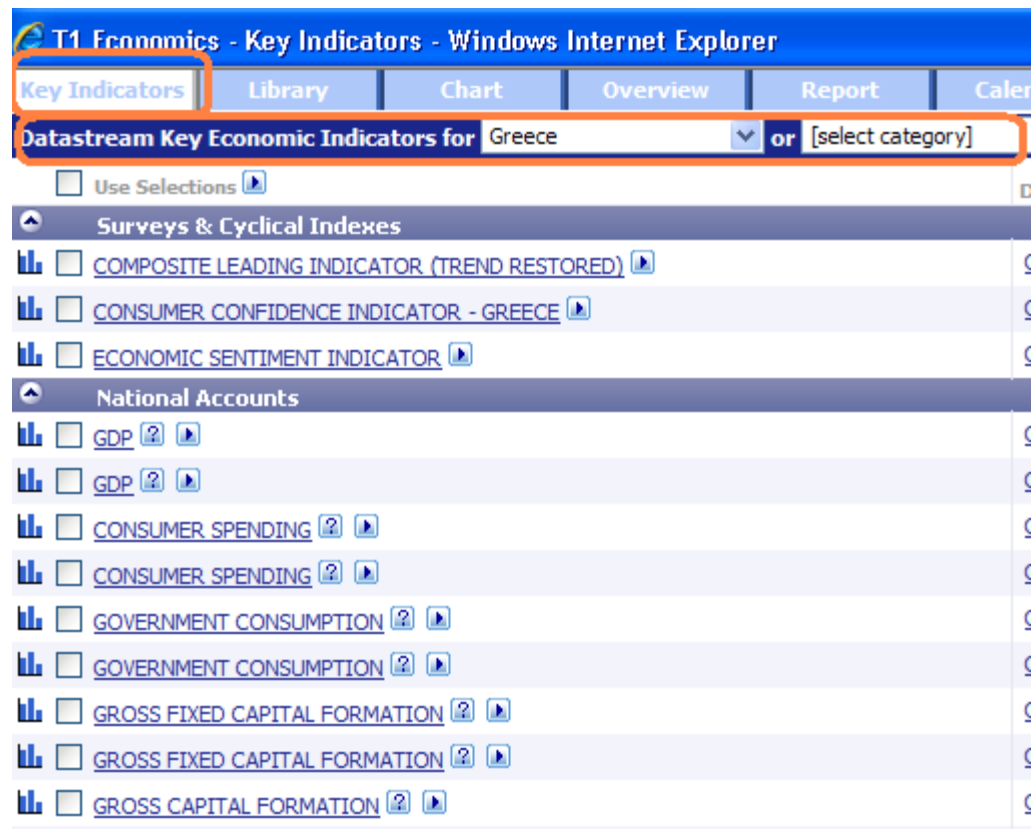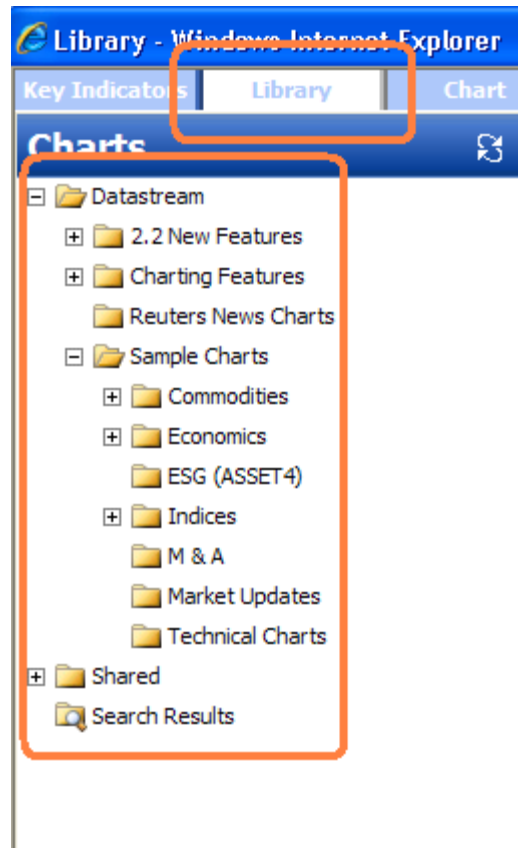
Charting Exercise 1

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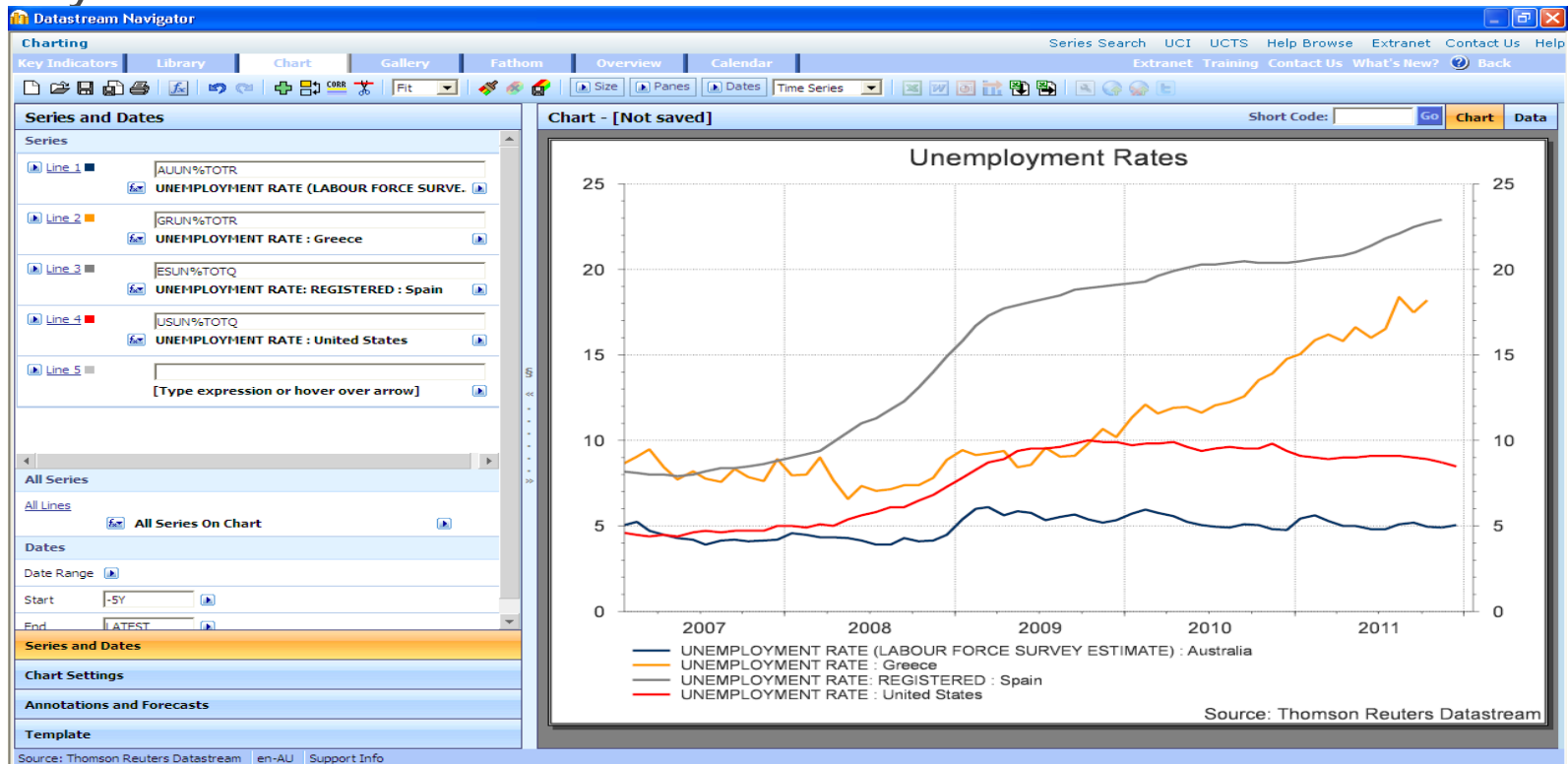
Charting Exercise 2

- 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

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Datastream Extranet

Datastream Extranet is a website contains extensive product related information and assist tools such as prebuilt AFO samplesheet.

Knowledge Network
http://training.thomsonreuters.com/

Datastream Certification -
https://training.thomsonreuters.com/cert/datastream/

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- Reuters 3000 Xtra
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- 2 attempts at the exam
- Get your result instantly

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Help & Support

Thomson Reuters Support (Australia)

•Phone: 1800 634 264

•Email: Go to Datastream menu → Contact Us

 English is supported 24/5

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Thank you for attending !

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