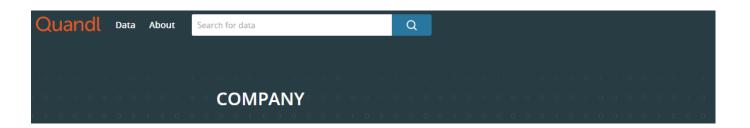
#### **Using Data From Quandl in EViews**

#### **David Giles**

September, 2014

#### 1. What is Quandl?

www.quandl.com



Quandles a Canadian technology company backed by one of Silicon Valley's most respected venture capital firms. Our team of 12 engineers is building the world's most comprehensive data platform.

Founded in 2012 by Tammer Kamel (**LI, G+, Tw**) and Abraham Thomas (**LI, G+, Tw**), Quandl operates from a spacious Victorian office in the **Annex**, Toronto. We're hiring software engineers and data industry experts. To learn more about opportunities at Quandl, please **email us**.

### **Brand Assets**

When using the Quandl logo, please use either the text or the icon but not both.

- JPG: Icon + Text
- PNG: Icon + Text
- EPS: Icon + Text

#### **Contact Us**

We welcome suggestions, comments and questions:  ${\bf connect@quandl.com}$ .

## Quandl is a data platform

# We're collecting all the numerical data in the world.



We have one mission: to help users find the data they need, in the format they want. Fast.

(2)

We support open data; we believe that free public data should remain free and public.

(3)

We respect copyright; we believe that data creators should own their data creations.

4

We are an open platform. The same tools we use to add and update the data on this site are available for you to use right now.

You can use Quandl's data for <u>free</u>, on a limited basis, without signing up. However, signing up is also <u>free</u>, and it gives you far greater access to their data.

Why sign up?

Registered users enjoy unlimited downloads, unlimited API usage and access to features like supersets, favorites and uploading.

Why should you use and trust Quandl data? Because every series is linked back to the original source.

## **About Quandl Data**

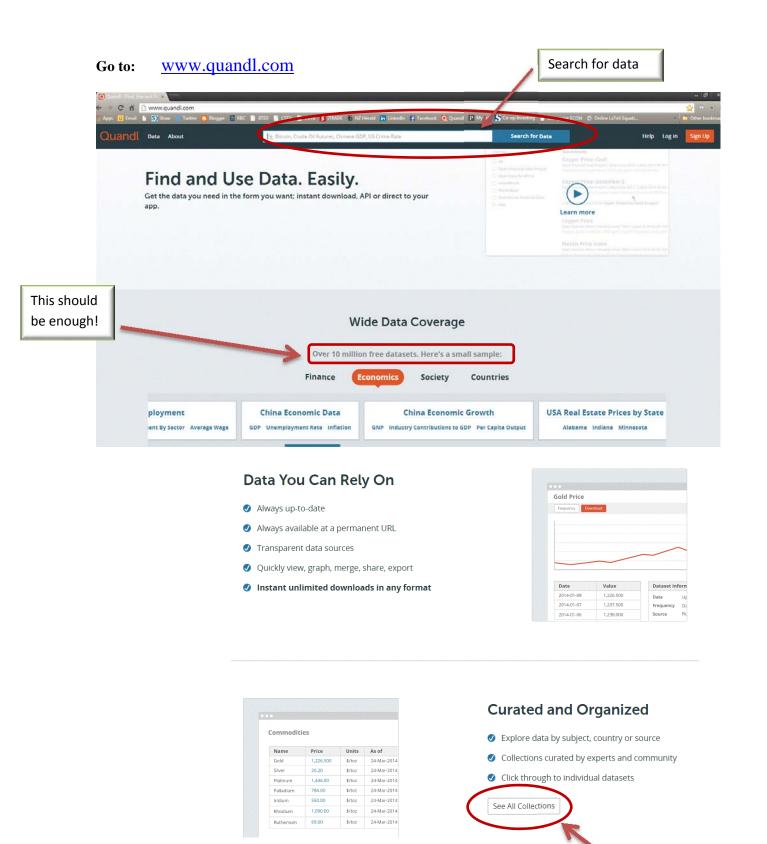
Over 10 million datasets from 500 sources, structured and highly usable. Unlimited and unrestricted usage, completely free. And totally trustable.

## Instant, unlimited downloads

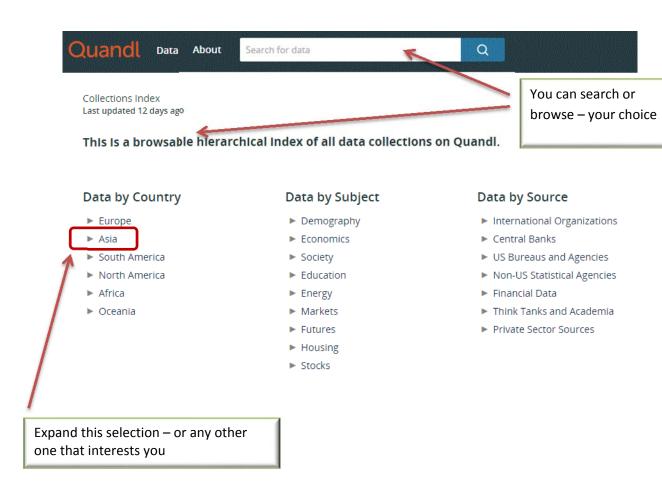
Download any dataset on Quandl in any format: Excel, CSV, text, JSON or XML.

#### **Trust**

Quandl has quickly become trusted by thousands of professionals for one reason: it's transparent. Every data page on this site has link to the URL where the data comes from. This is the ultimate form of reliability: if we say the data is correct and sourced from a certain publisher, one click confirms it. This is true for every dataset on this web site. Transparency creates instant reliability.



Check it out



Let's find some trade data for China ......

#### Data by Country

▶ Europe



- Afghanistan
- Armenia
- Azerbaijan
- ▶ Bahrain
- ▶ Bangladesh
- ▶ Bhutan
- Brunei
- Cambodia



China Statistics Overview

Alcohol and Tobacco

Culture

Demography

Economic Growth

Economy

Education

Energy

Government Spending

Growth

Health

Inflation

Inflation and Prices

Infrastructure and Construction

Labour and Unemployment

Mortality

Population

Population

Society

Transport and Travel

Unemployment

#### Data by Subject

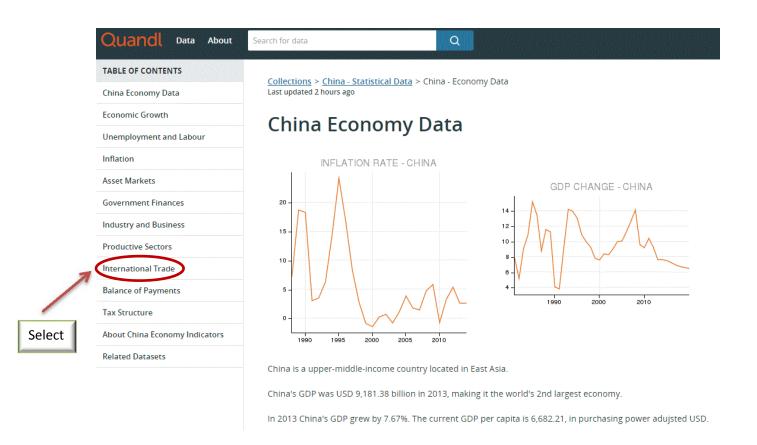
- Demography
- ▶ Economics
- Society
- ▶ Education
- ▶ Energy
- ▶ Markets
- ▶ Futures
- ▶ Housing
- ▶ Stocks

Expand this selection

#### Data by Source

- ► International Organizations
- ► Central Banks
- ► US Bureaus and Agencies
- Non-US Statistical Agencies
- Financial Data
- ► Think Tanks and Academia
- Private Sector Sources

Then, select this, for example





#### **International Trade**

Trade data for China includes imports, exports and reserves.

Chart		Source	Indicator	Level	As Of	Chg	5 Yrs Ago	Api Call	vs World
IMPORTS - CHINA		United Nations	<u>Imports - China</u>	1,818,199,227,571.00	2012	4.29%	956,115,447,556.00	JSON, CSV	
1500B - 1000B - 1500B -		United Nations	Exports - China	2,048,782,233,084.00	2012	7.92%	1,220,059,668,452.00	JSON, CSV	■
		World Bank	<u>Total Reserves - China</u>	3,839,547.77	2013	15.26%	1,949,259.95	JSON, CSV	
		World Bank	Imports as Share of GDP - China	23.84%	2013	-2.71%	27.27%	JSON, CSV	≣
2000	2010	World Bank	Exports as Share of GDP - China	26.40%	2013	-3.37%	34.98%	JSON, CSV	<b>=</b>

#### 2. Plug-ins to Interface Quandl With Other Software:

It's really easy to get data from Quandl into most of the standard statistical/econometrics packages and programming languages, without having to resort to any tedious (accident-prone) copying and pasting. The following software is supported by Quandl, and this list is being extended regularly:

## **Quandl Libraries**

Quandl libraries and plugins allow you to get Quandl data directly into the tool of your choice. You can use any of the following to access our data:

- . .
- Python
- Matiab
- Stata
- Maple
- SAS
- EViews
- Ruby
- java
- Node.JS
- C#
- C/C++
- .NET
- Julia
- Clojure
- Haskell
- Go
- Octave
- TradingView
- Mode
- Plotly
- Quantopian

Below, we'll see how to use an EViews "Add-in" to provide a seamless interface to Quandl data

#### 3. EViews Add-ins:

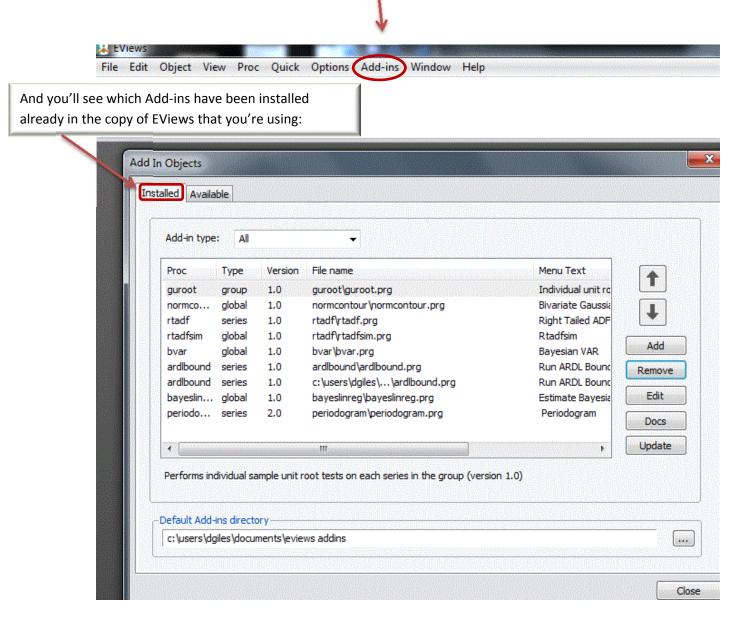
There are lots of "Add-ins" available for EViews, and you can find out more about them on the EViews website, www.eviews.com





#### 4. Installing the Quandl Add-in for EViews:

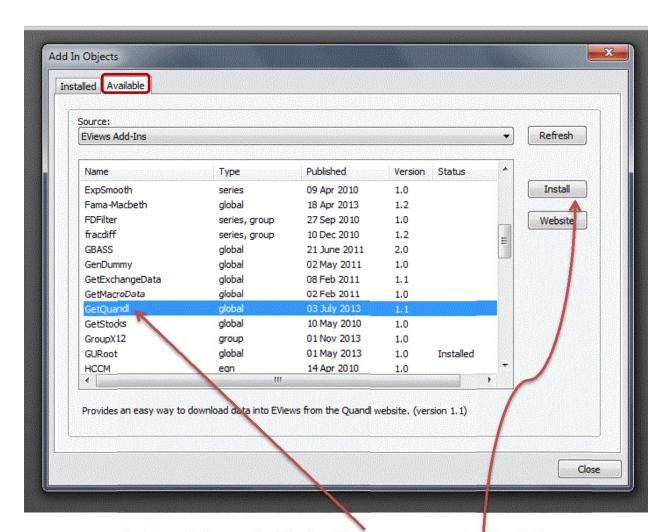
You will only have to do this ONCE. Launch EViews, and in the top menu bar select: "Add-ins"; "Manage Add-ins"........



You can toggle between the "Installed" and "Available" Add-ins ......

Keep in mind that once you've installed a particular Add-in for your installation of EViews, you don't have to do it again. You can go straight to section 5 below.

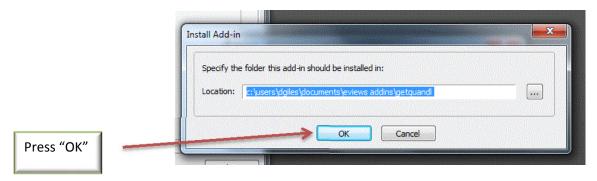




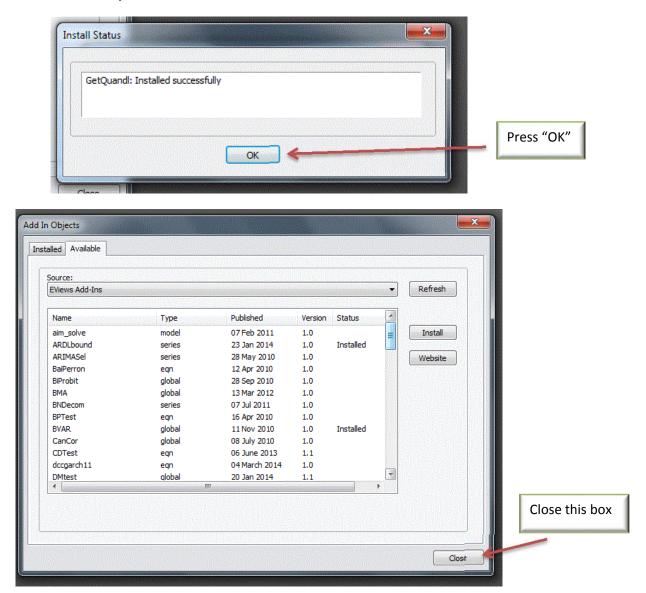
You can see that in this particular case the "GetQuandl" Add-in is available for installation.

It's just a matter of highlighting it, as shown, and pressing the "Install" button.

Just go with the default folder (whatever that is) for storing the Add-in:



Once the Add-in is installed, you'll see:



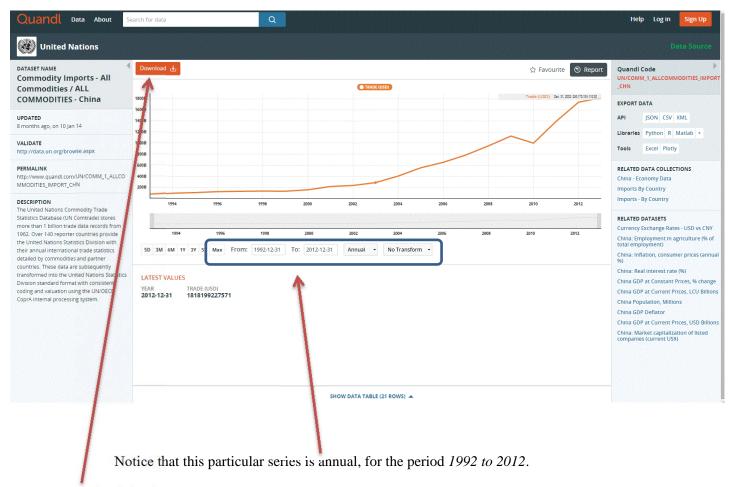
You're now ready to use this Add-in to bring Quandl data into an EViews workfile.

#### 5. Using Quandl Data – An Example:

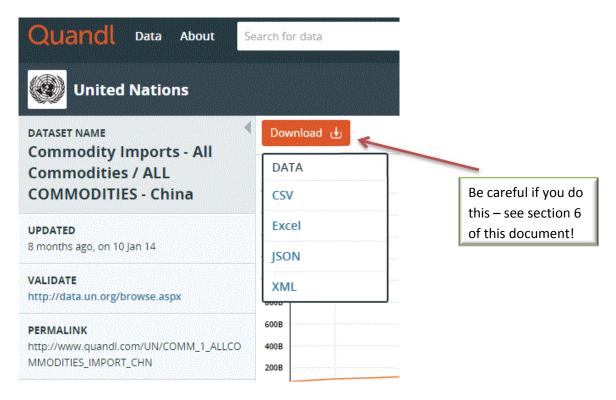
Let's take a look at the Chinese trade data, shown on p.4 of this document:



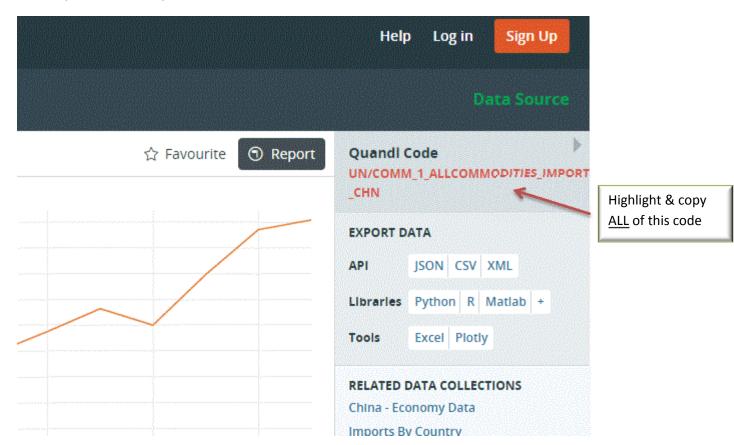
You can see that the data for Imports and Exports are sourced from the United Nations. If we click on the highlighted "Imports-China" indicator, we will see the following:



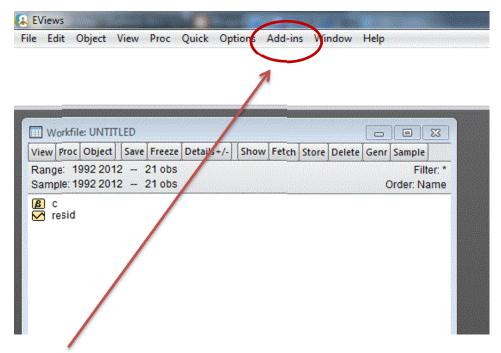
You can download the data into a spreadsheet, if you need to, but that's not what we're really interested in doing here:



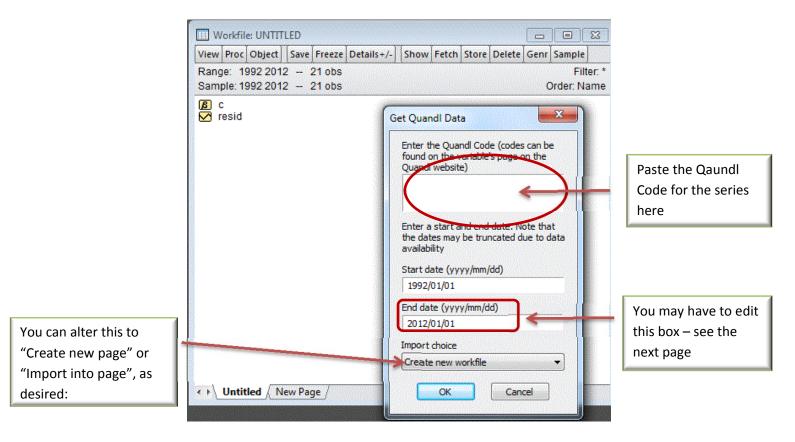
Instead, take a look at the "Quandl Code" for the series we're handling here, as this is the information we need to get the data straight into EViews:

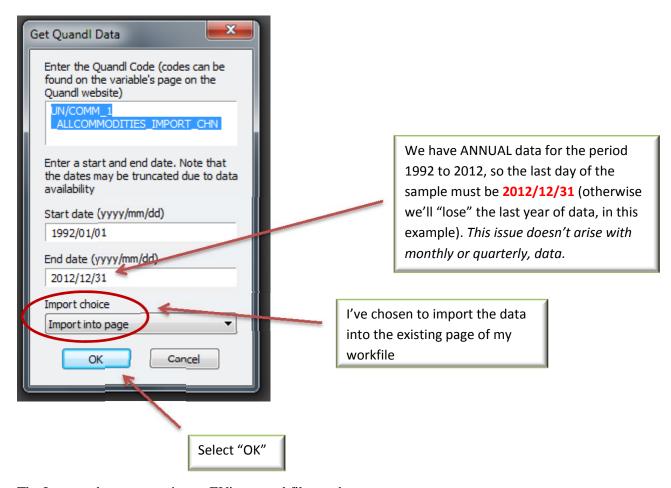


Now we're ready to work with EViews. First, create a new workfile with the appropriate sample, in this particular it's Annual, spanning the period from 1992 to 2012:

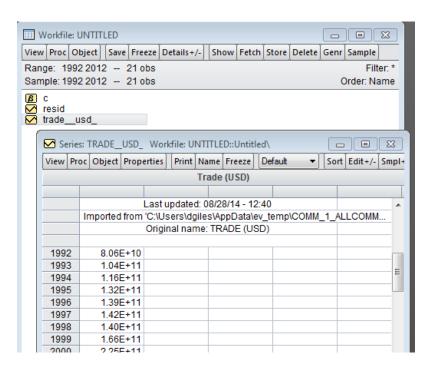


Then, select "Add-ins", and choose "Download Quandl Data:





The Imports data are now in our EViews workfile, ready to use:



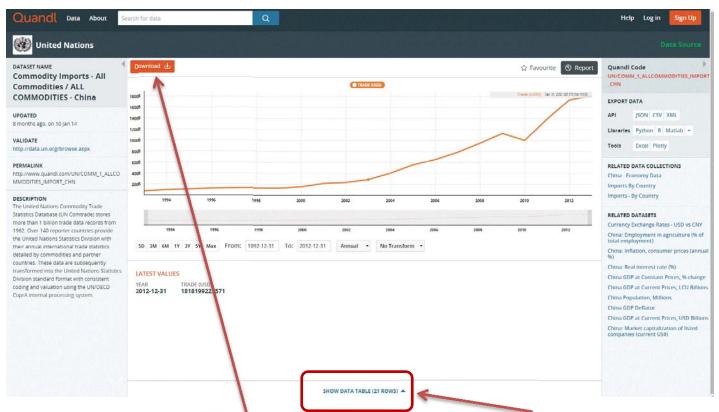
#### 6. Warning!

Notice that, on the last page, the time-series of data is in the order that we'd expect in EViews – namely, from "oldest" to "newest" dates. You probably know that some databases actually store time-series data in the <u>reverse</u> order to this – that is, with the most recent values at the "top" of the series, and the oldest values at the "bottom". This is always something to watch for when you're importing time-series data from an external source – e.g., financial data from Yahoo!

As it happens, this "reverse" convention is used in Quandl. So, if you chose to "grab" some Quandl data directly, you're going to have a problem, unless you take this into account when importing it into an EViews workfile. Alternatively, you can "flip" the series (*e.g.*, using Excel) before putting it into EViews (or any other standard econometrics package).

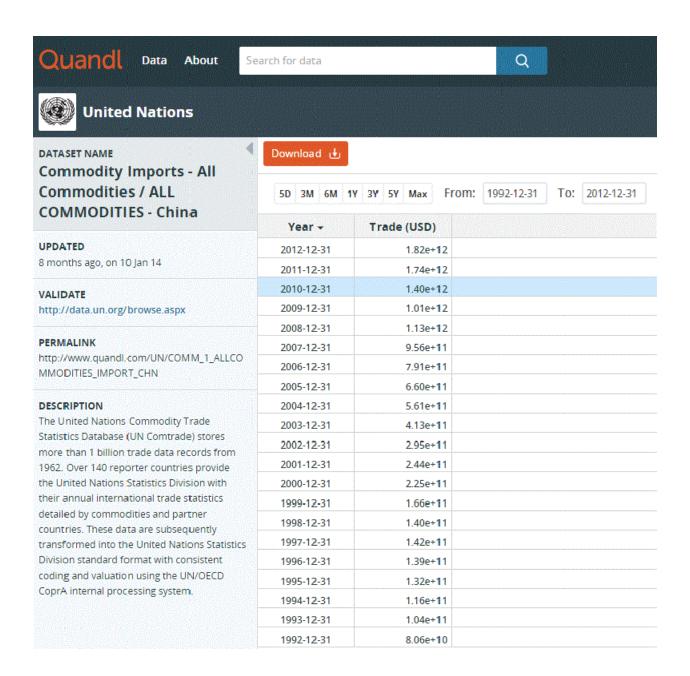
Be careful! There's nothing worse than doing all of your econometric modelling and then finding out that your daets were actually in the reverse order!

To elaborate on this point, let's go back to the Quandl page for the Chinese Imports data that we saw on p.10 of this document:



It was noted earlier that you could download the data into a spreadsheet. You can also view the data that have been plotted.

First, suppose that you decide to view the data – this is what you will see:

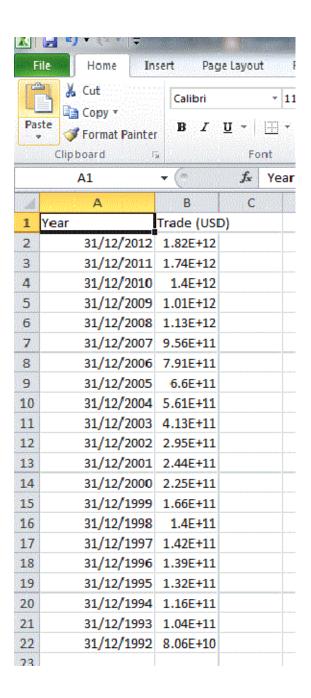


As you can see, the series in the reverse order, compared with what we're used to! So, a simple "copy and paste" of (just) the Trade data from this page into an existing EViews series isn't going to work!

However, all is not lost. If you "copy and paste" **both** the dates (the "Year" series, in this case) **and** the data (The "Trade values, in this case) into an existing series in an EViews workfile, everything will be alright, because EViews is smart enough to sort things out for you. The series will end up being stored, correctly, from "oldest" date to "newest" date.

Thank you, EViews Team!

Similarly, if you download the data from Quandl to an Excel, .csv, or HTML file, the same problem arises – the series runs from "new" to "old", rather than from "old" to "new":



Yes, you could now "flip" the data series n Excel – as long as you remember to do so before copying and pasting the numbers into EViews!

To play it safe, and minimize the extent to which you're "handling" the data, using the EViews Add-in for Quandl might be a better choice.