

Instructions to set up FRED and HP-filter Excel Add-ins

During this course you will be required to solve computational problem sets. For this purpose you need to have two add-ins running on your Excel. Here are the instructions for their installation.

FRED Add-in

1. Download the St. Louis Federal Reserve's FRED Excel Add-in at <http://research.stlouisfed.org/fred-addin/>
2. Unzip the file you have downloaded and save it where you want to keep it (you should not move it afterwards).
3. Open Microsoft® Excel® and click on the File Button in the upper left-hand corner of the window. Choose Excel Options from the drop down menu. If you have a Mac, use the Tools Button and choose the Add-ins... menu.
4. On the left side of the window choose Add-ins. On the bottom of the window choose (Manage: Excel Add-ins) Go.
5. In the new window, choose Browse and locate the file fred.xlam that you downloaded and saved in a folder. Click OK.
6. Make sure the check box next to FRED is checked. Click OK. You will be prompted with a security warning asking if you want to allow Macro's and data connections from the Add-in. Click OK.
7. Close and re-open Excel to verify that the Add-in has been installed correctly.

HP-filter Add-in

1. Download the HP-Filter for Excel written by Kurt Annen at http://www.web-reg.de/hp_addin.html
2. Follow the same instructions as above to add the add-in in your Microsoft® Excel®.

3. Or open the file HP-Example.xls and follow the instructions (if you have Microsoft® Excel® 2010 or older you have to go in File - Options - Add-ins).

Example

Let's see now how these Add-ins work and what is their purpose.

1. Download the data using FRED Add-in. Select the cell in A1; in Mac: click Alt+Cmd+T, in Windows: use the FRED menu in the upper command bar; use the options Browse or Data Search to find the series you want to download; when you find it, click on it and you will have the corresponding code name in the A1 cell; click on Get Fred Data in the FRED Menu, and in a few seconds the data will be downloaded.
2. Take the natural logarithm of the series.
3. Use the HP Filter. Select the whole range of cells where you want to have the results, with a length corresponding to all time periods. Type =hp(), and within () insert the range of cells containing the log time series and - after a semicolon - the smoothing coefficient equal to 1600 if you are using quarterly data, 14400 if the data are monthly, or 100 if the data are yearly. Click Ctrl+Shift+Return.
4. The HP Filter gives you the trend of a series. To find the deviations in the corresponding column, subtract the trend from the log data, and normalize this difference by dividing it by the trend value.