List of the files provided

The files are distributed into 5 directories for as many models:

- A very small model (2 equations) called **nano.** It displays the full set of statements needed to run the whole modeling process.

In addition to this display, it explains in detail the role and the syntax of all the statements in the process. This should make it a useful reference for more operational tasks.

The Eviews program is fully commented.

- Elements for the construction of a more detailed model. It is organized as a course presenting the modeling process, addressing its different aspects
  - Econometrics
  - Macroeconomics
  - Logical organization of the process, both at the global and detailed level
  - Software management.
- A set of programs which can be used as a starting point for building your own model, as detailed in the textbook. You do not have to agree on the author's specifications, of course. But if the scope of your project is similar to the version proposed here, you will be saved much of the framework building and data production tasks, the most tedious and non-theoretical ones. In any case, you will be given a consistent and error-free set from which to start. Then you can concentrate on the original features of your project, and its econometrics.
- Two sets of programs developing the above ideas into actual working models, using different production functions (complementary factors and Cobb-Douglas) described in the textbook
- In addition, one will find a program allowing to reach automatically a given set of formally endogenous targets, through the release of the same number of exogenous elements.

  Success is not guaranteed but if it occurs, an exact solution is obtained very quickly.

Directory nano : the very small model

This section contains only three files:

nano_q.xls, an Excel file with 2 quarterly series known from 1975 to 2010. These are the series needed by the tests.

nano_q.prg, an EViews program, fully documented, running the full modeling process over a 2 equations model.

nano_q.wf1, the resulting EViews workfile. It is not really needed, as it will we created by the above program.

Directory pic : the small model

This section contains a full course in structural model building, with text, files and programs.

Pic_questions.doc and **pic_answers.doc** : two Word files with the questions and answers for the course, organized in five lessons.

Fra_q .xls : an Excel file with the required information (72 quarterly series for France, from 1962 to 2010)

The Eviews programs:

pdon_a.prg a : building the model framework, adapting the OECD data to the model. Estimation is not performed yet, but the theoretical target is established, allowing some preliminary tests.

preg_a.prg : producing the first set of estimations, using simple econometrics.

psim_a.prg : producing and testing the first model. It evidences some problems.

preg_b.prg : producing the second set of estimations, taking into account the results of the above tests.

psim_b.prg : producing an improved model and testing it over the past.

pfor_b.prg : simulating and testing the second model over the future.

pfor_bs.prg : producing stochastic simulations (over the future)

pfor_bx.prg : applying rational expectations (over the future)

Running these files in sequence will illustrate the phases in the model building process.

To allow checking the process, and to observe the model elements without running the full set, we have provided a workfile: **pic_q.wf1**, as the result of the first five programs. It contains all the transformed data, and the two models in separate pages.

Directory fra_0 : the framework for the small operational model

The files are designed for the production of a 75 equations model, which can be used as a basis for an operational, single country version.

They treat in succession

- creating the data,
- producing the equation framework

However, the data creation statements are only indicative, and the behavioral equation specifications show only an intended formula, with no operators or coefficients.

The goal of these programs is to give the user a complete and error free set of equations and data, from which he can start by :

- Changing the right side of the data creating statements, according to his original information.
- Changing the formula for the behavioral equations, according to his theoretical ideas (and the econometric diagnosis).

The files provided are :

- A data file : **fra_1.wf1**. This is an EViews workfile containing 179 quarterly series for France and 10 for OECD (they will be used for international trade assumptions).

These series are documented.

- Three EViews programs:

Genr_0.prg for creating the model series

Def_0.prg for associating definitions with the series created

Model_0.prg for creating the model framework.

- An Excel table with information on the series : **definitions.xlsx**

As the equations are not estimated, no solving (over the past or future) is performed.

Directory fra_cf : the operational model, complementary factors version

These files use original data to build a fully functional complementary factors model.

They start from the same **fra_1.wf1** workfile as above.

Four EViews programs are provided:

genr_fra_cf.prg for creating the model series.

def_fra_cf.prg for adding a definition to the series created.

model_fra_cf.prg for creating the model (including estimations) and checking it over the past.

proj_fra_cf.prg for testing it over the future (including some shocks).

Directory fra_cd : the operational model, Cobb – Douglas version

The Cobb-Douglas version uses the same file organization. In each file name, "cf" is simply changed into "cd".

Directory star : the targeting algorithm

This algorithm allows to reach specified values for a set of endogenous variables. For this, you must free a set of exogenous variables, with the same number.

You only have to specify in specific places in the program:

- The name of the model
- The period for simulation
- The list of targeted variables
- Their target values
- The list of freed exogenous.

You do not have to recompile the model.

The files are:

- **usa_starsub.prg**, a program working for a small model of the USA. The part of the program you should paste into yours is clearly defined.
- **usa_model.wf1**, the workfile containing the US model, so you can test the algorithm before applying it to your case.