A User Interface for Running G7 Macro Model

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1. Why do we have this issue?

- Model development situation:“farmer economy”, using the product by the producer self.
- Research project partners hope to use the model by themselves, rather than just are told the results.
- The partners more or less have knowledge of modeling and have no time or experiences in model building, especially in mastering the model development tools such as the software of EVIEWS or G7.

1. Why do we have this issue?

- it is better to let a model run independently leaving the software environment of developing the model.

- It is also necessary to provide user interface for preparing the values for exogenous variables, the fixer demands for endogenous variables and the specific requirements for tabling the results from running the model, according to the rules from the model development software tool.

2. What is the advantage of G7 in realizing the object?

- Models developed by using different software have different difficulties. The model developed by using EVIEWS will have to run in EVIEWS. Therefore, all the necessary preparations before running the model have to be done in EVIEWS. To run a model, the EVIEWS itself has to be run because the execution of the model needs its interpretation. It is decided by the relationship and mechanism between the development software and the mode. It means it will be necessary to master some knowledge about EVIEWS if ones hope to “play” a model developed by using EVIEWS.

2. What is the advantage of G7 in realizing the object?

- The models developed by using the software G7 have the potential advantage to run it without G7. As we know, the model developed by using G7, in fact, is an executable file called “run.exe” in the case of macro model or an executable file called “dyme.exe” in the case of inter-industry (Econometric plus Input-output) model. It means that the model can run individually or independently.

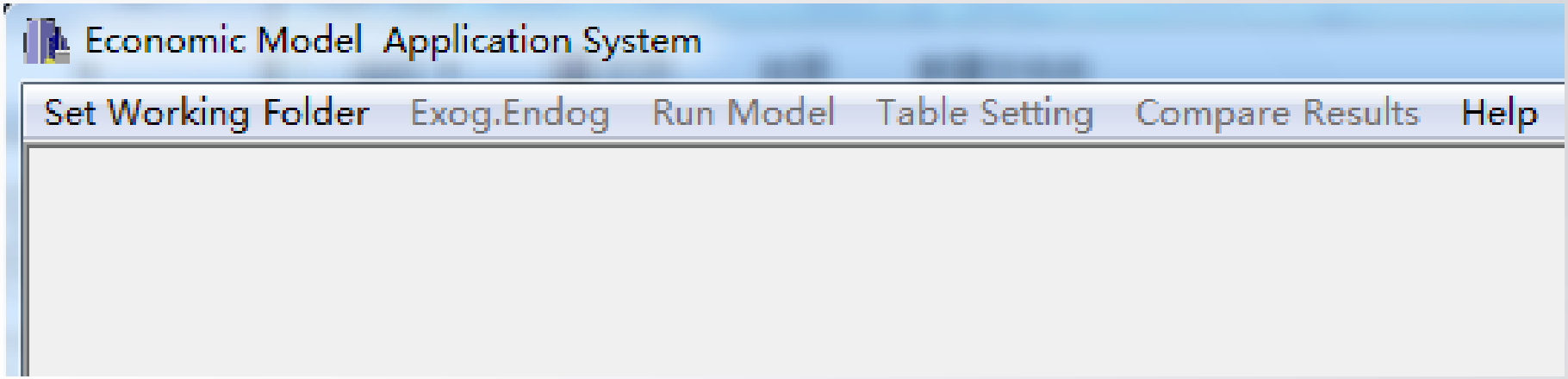
2. What is the advantage of G7 in realizing the object?

- This feature gives us the opportunity to use the model without much knowledge about G7. In other words, if we can design a user interface in which all the necessary preparations for running a model (give values to exogenous variables, set fixer information for endogenous variables) and for looking or comparing the results from model run (set display table format) can be done with the forms that people are easy to learn and to operate.

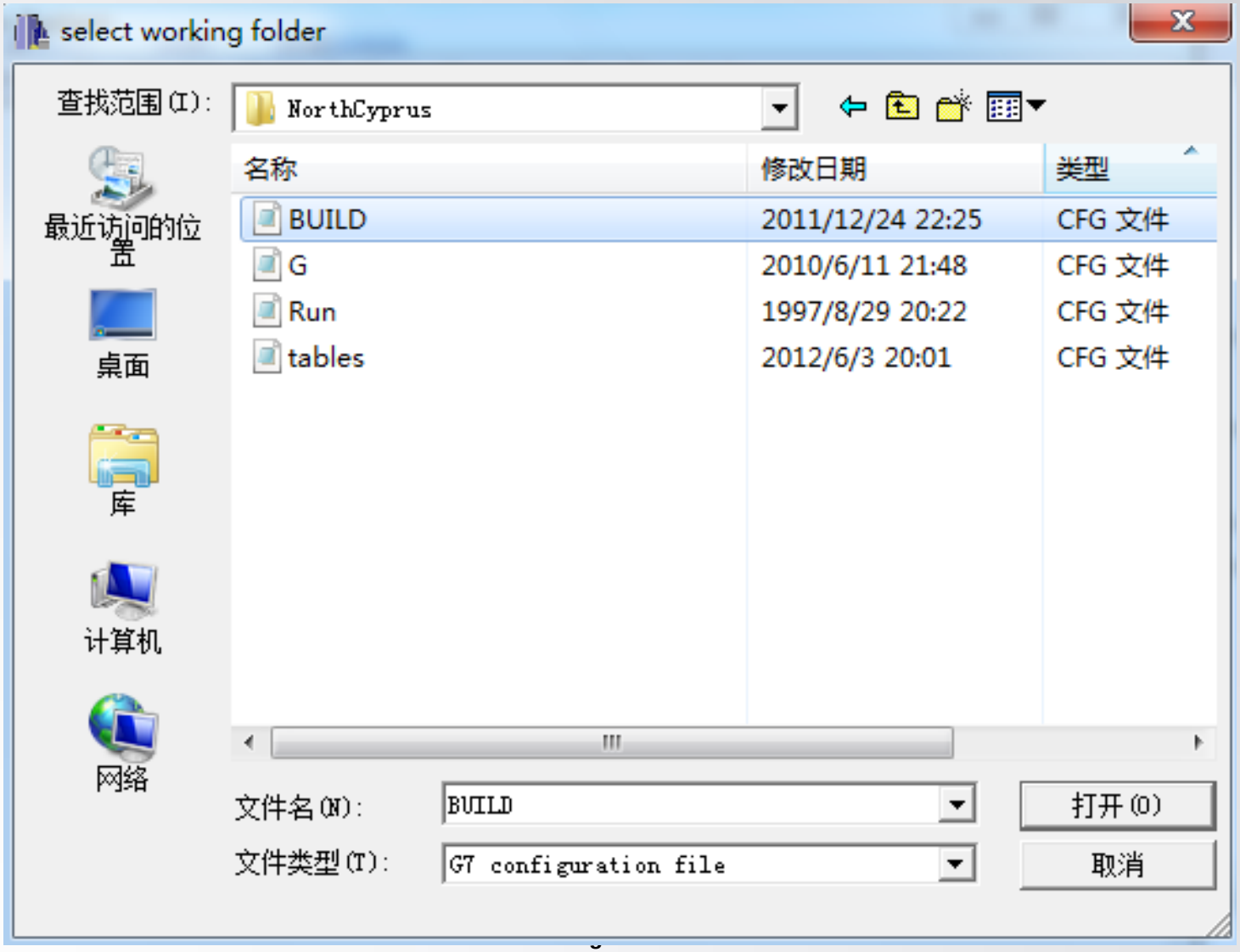
3. How is the current situation of the solution?

- The current situation of the solution for user interface to run G7 macro model is a single user version, which needs to be installed into his/her PC and has the name “Economic Model application System”.

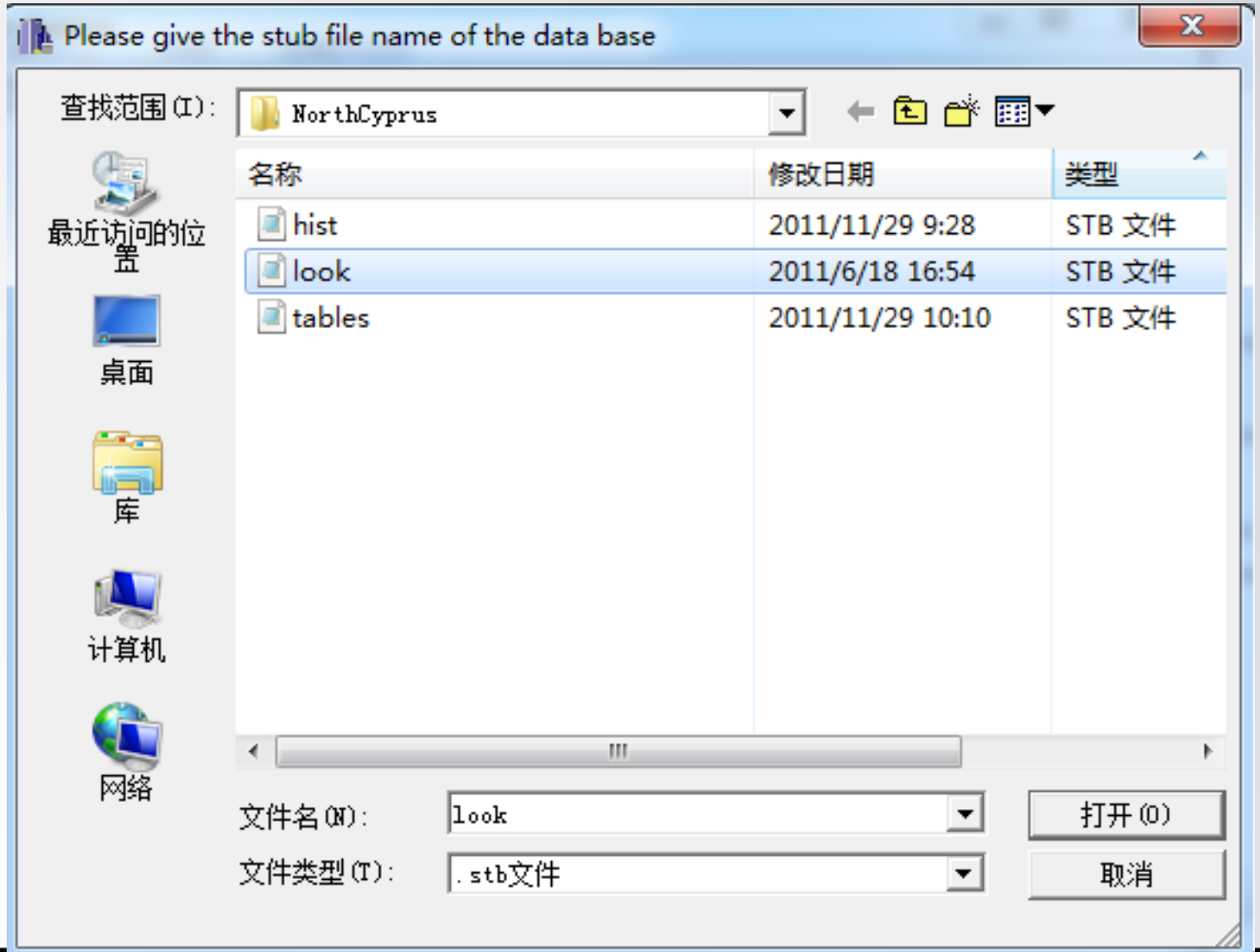
(1)Starting the system



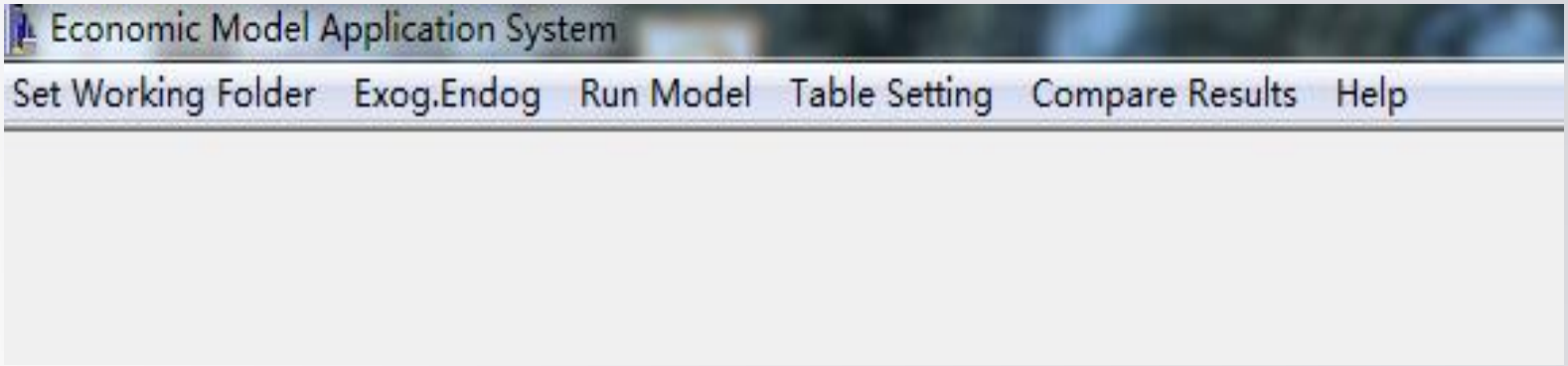
In the selected file folder, there has to be the file “build.cfg” which is one of the necessary files during the model building. Need "bws" information.



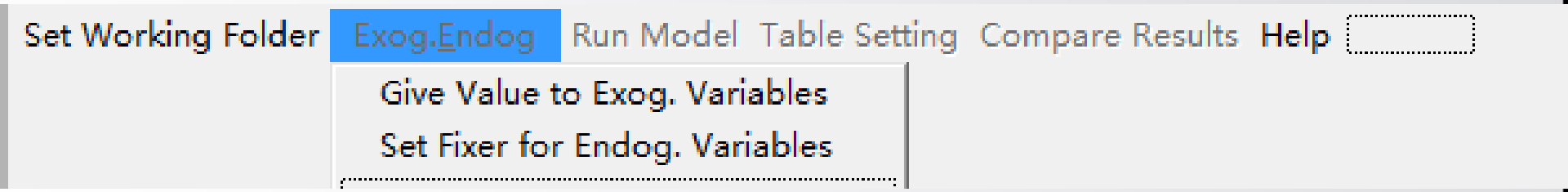
will ask the “stub” file which is necessary when displaying exogenous or endogenous variables.



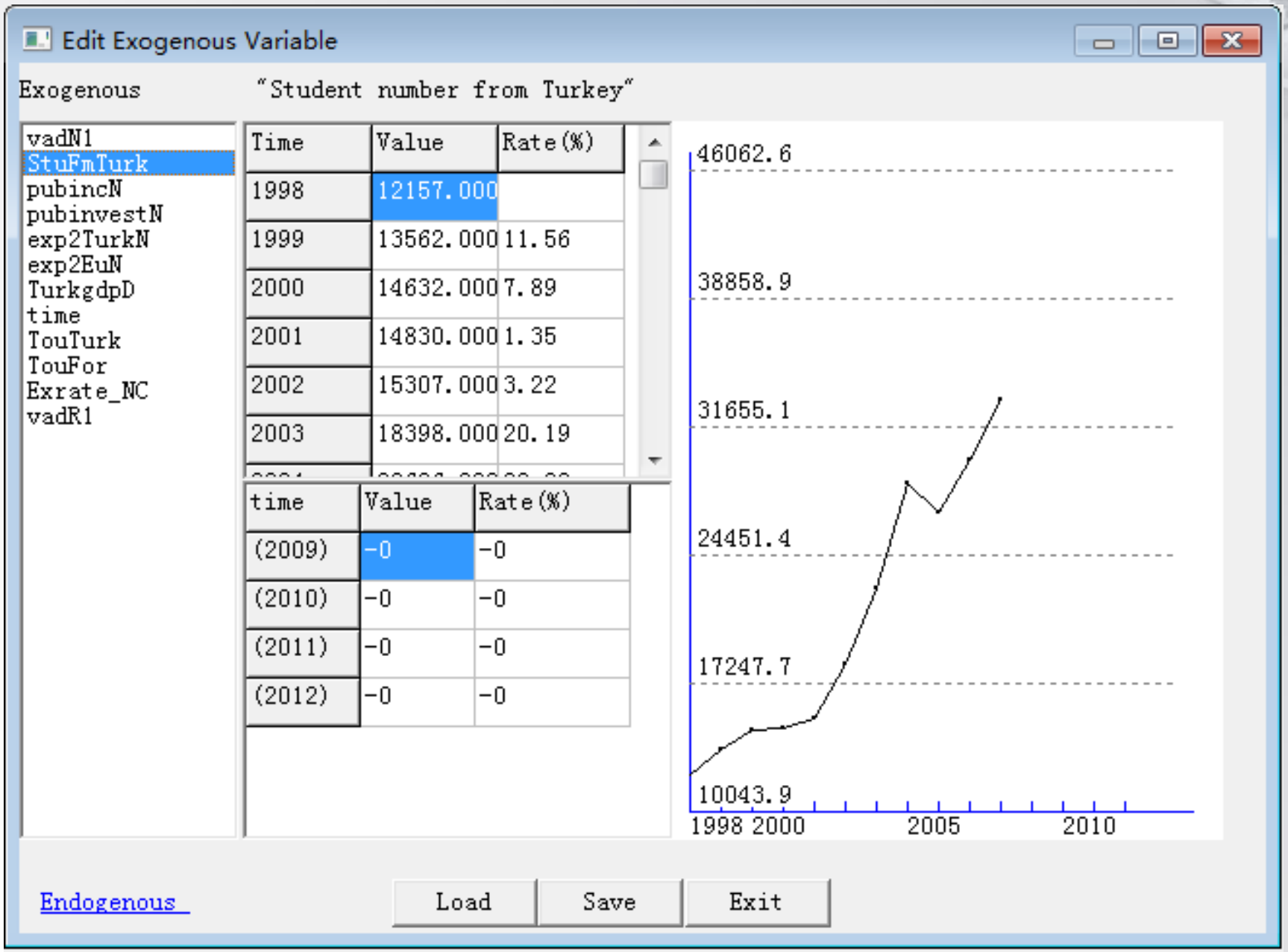
After the selection of “stub” file, the main menu of the system changed into following in which all the items of the main menu are bright or active.



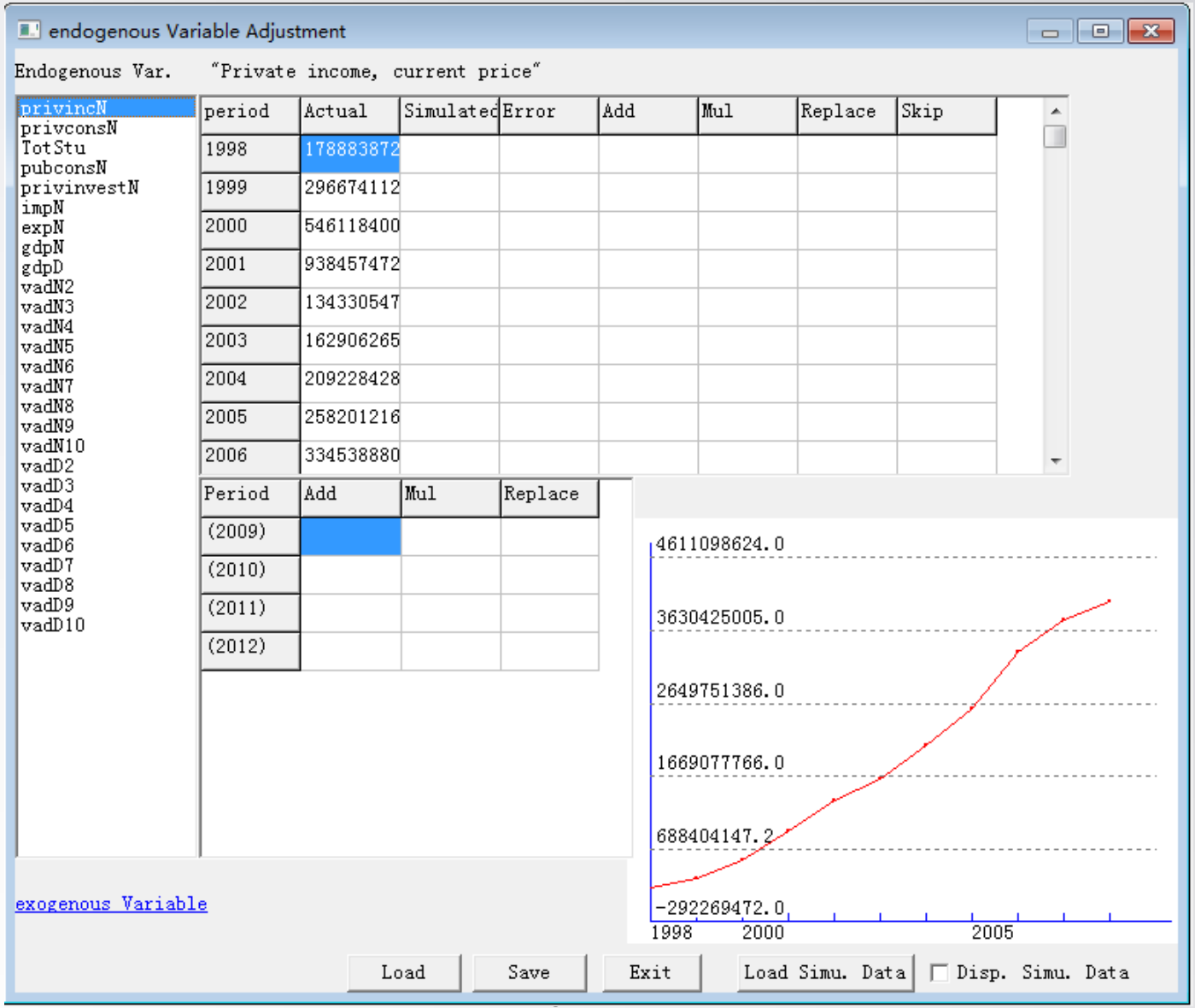
To prepare exogenous variables or set fixer information for endogenous variables, select the item “Exog.Endog”.



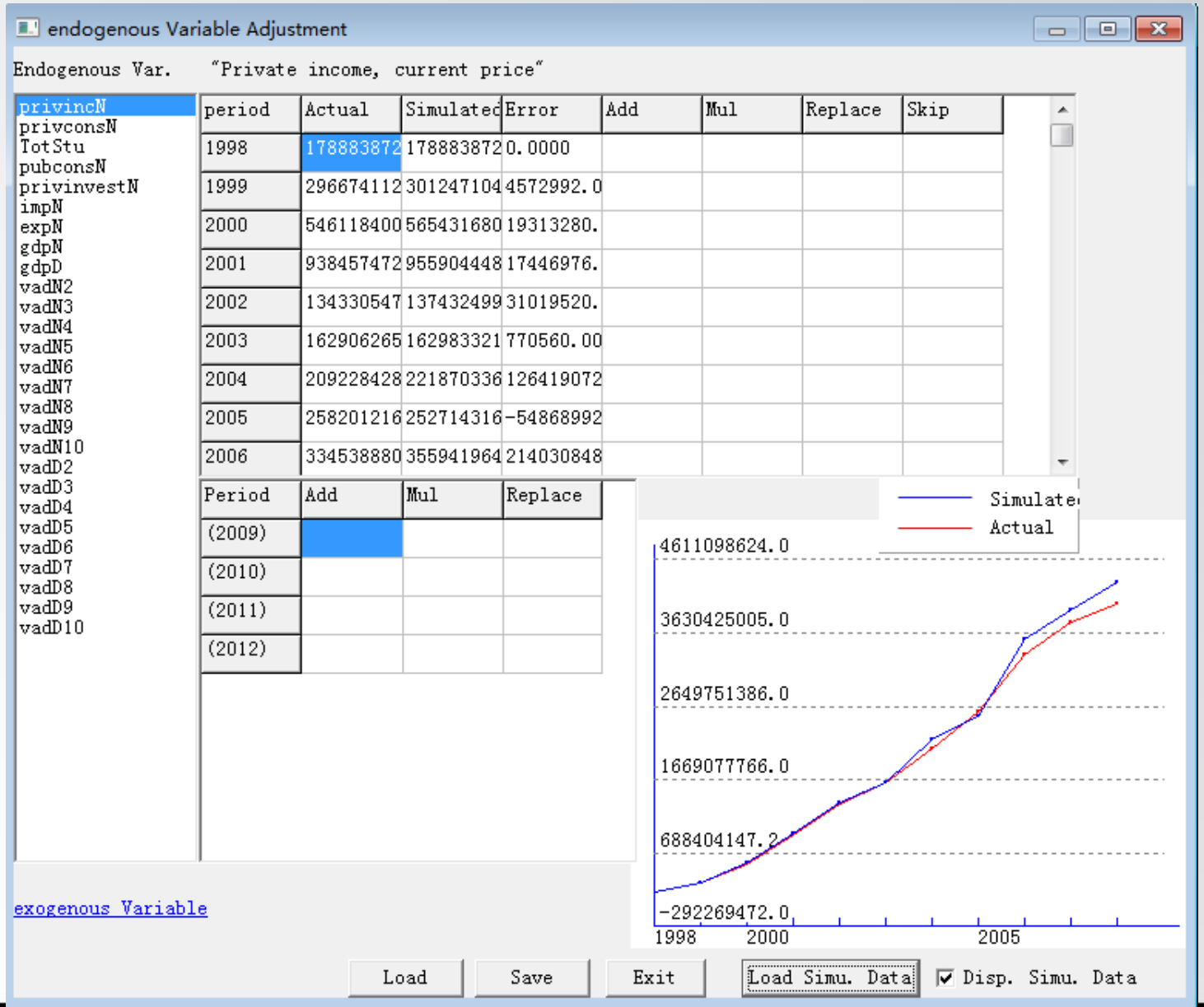
Three options for giving values



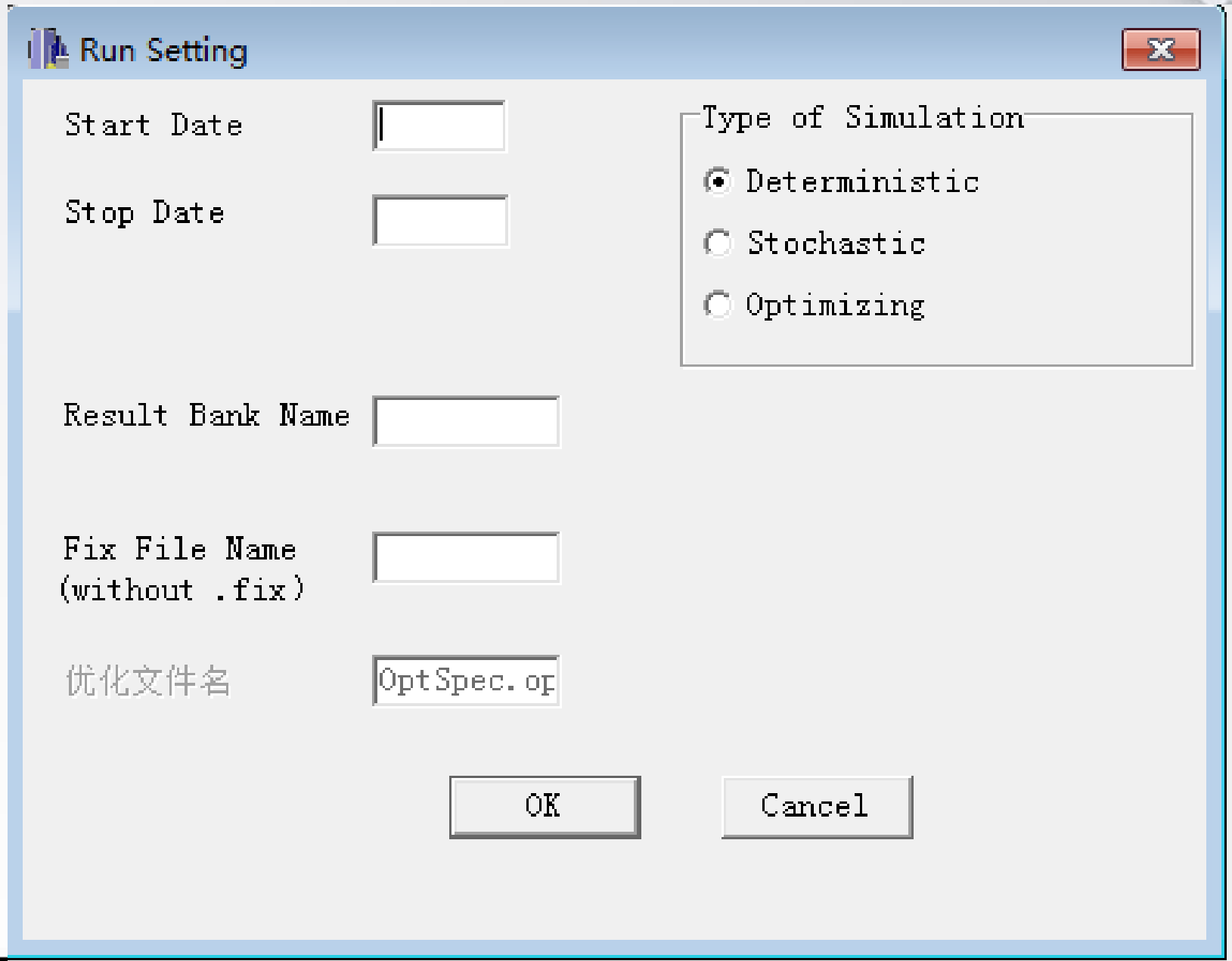
Set fixer for endogenous variables:four parts



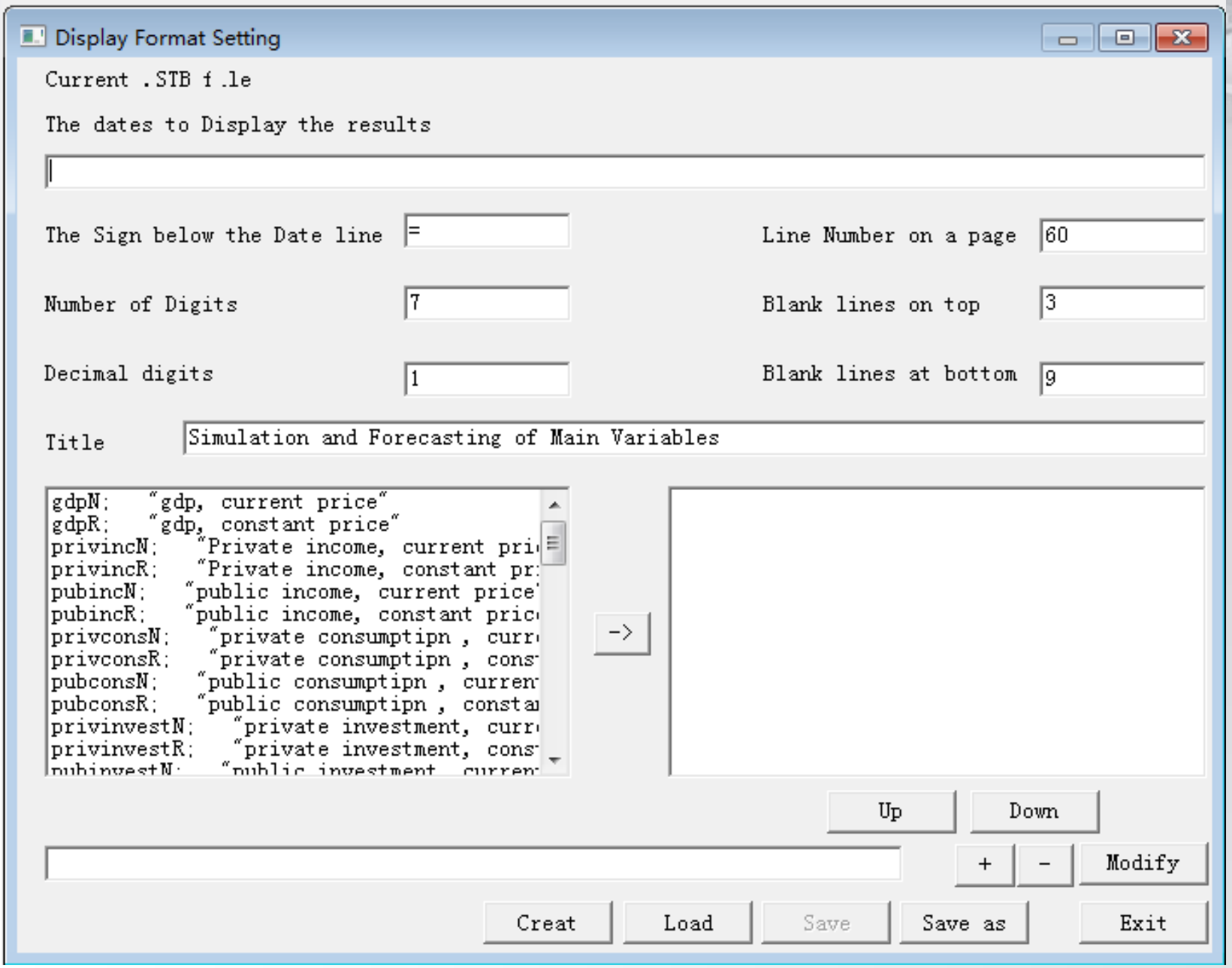
Set fixer for endo. variables: with simulation results



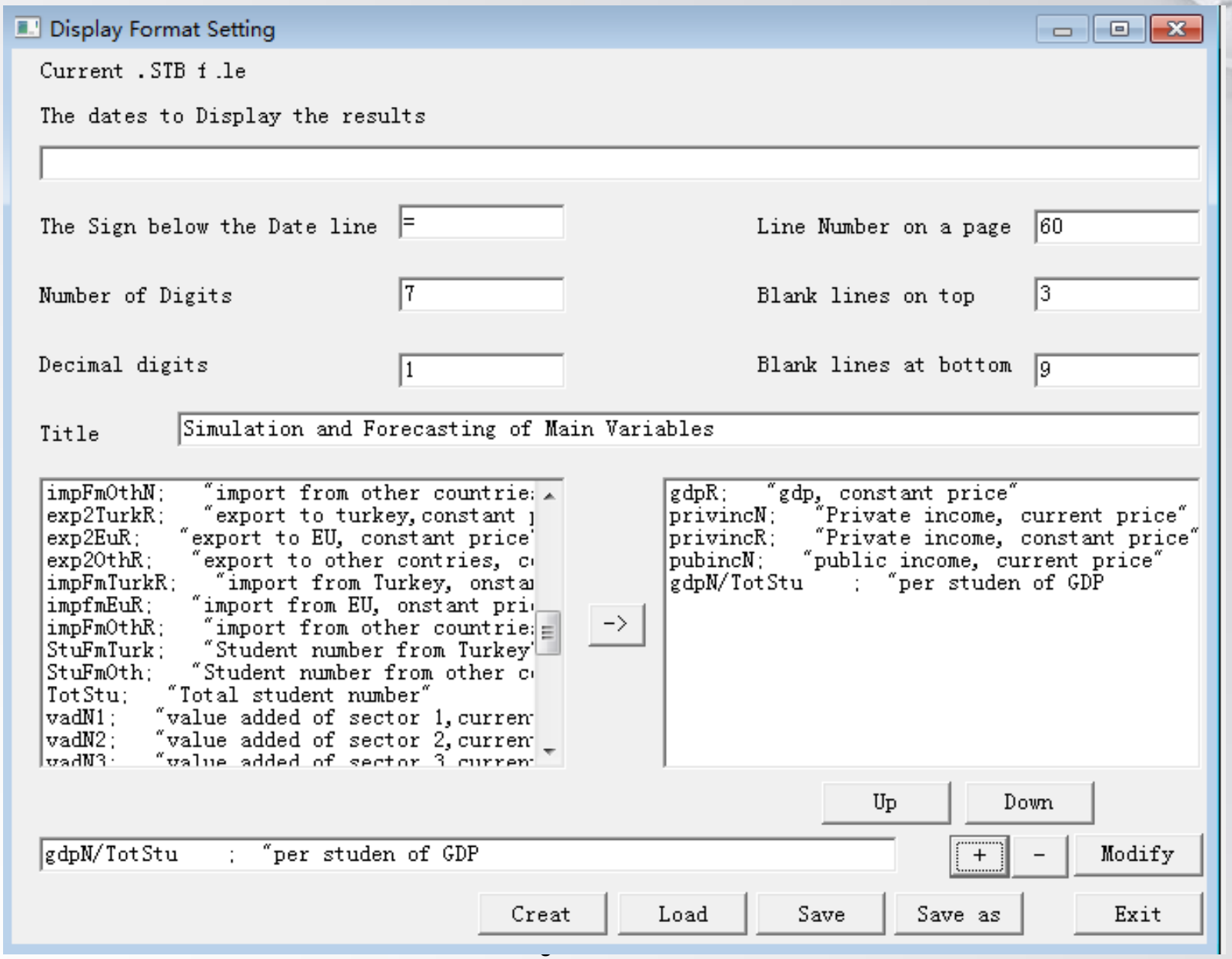
Run model


Run Setting
Start Date
Stop Date
Type of Simulation
Deterministic
Stochastic
Optimizing
Result Bank Name
Fix File Name
(without .fix)
优化文件名
OptSpec.op
OK
Cancel

Set the Stub File for Results Comparison



An Example of Setting Stub File



The Interface for Result Comparison

4. More satisfactory solution

- Now is only a single PC user version.
- Need to have it works in network environment.
- Current opinion: to design a web service program

(1) has model menu for users' selection.

(2) judge whether it is his/her first time to access this model,

(3) judges if the model in server has newer version than that one of the client has had.

(4) shows a window for prompting the user to download the model files, including its data bank.

- Further consideration:to develop a new "build" program to generate a model which can directly run in a network environment.

Thank you for your attention!