



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.

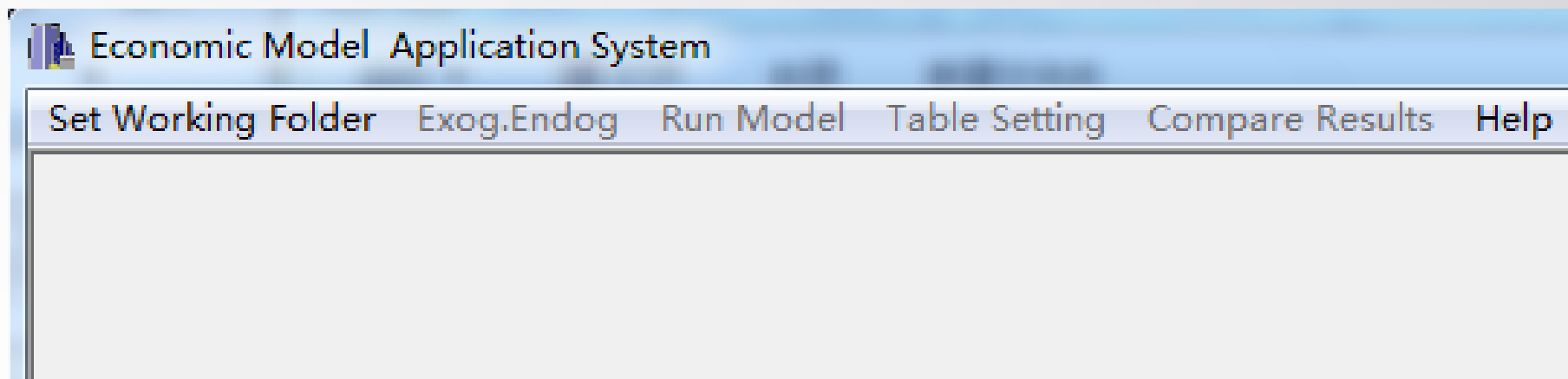
2. What is the advantage of G7 in realizing the object?

- 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.

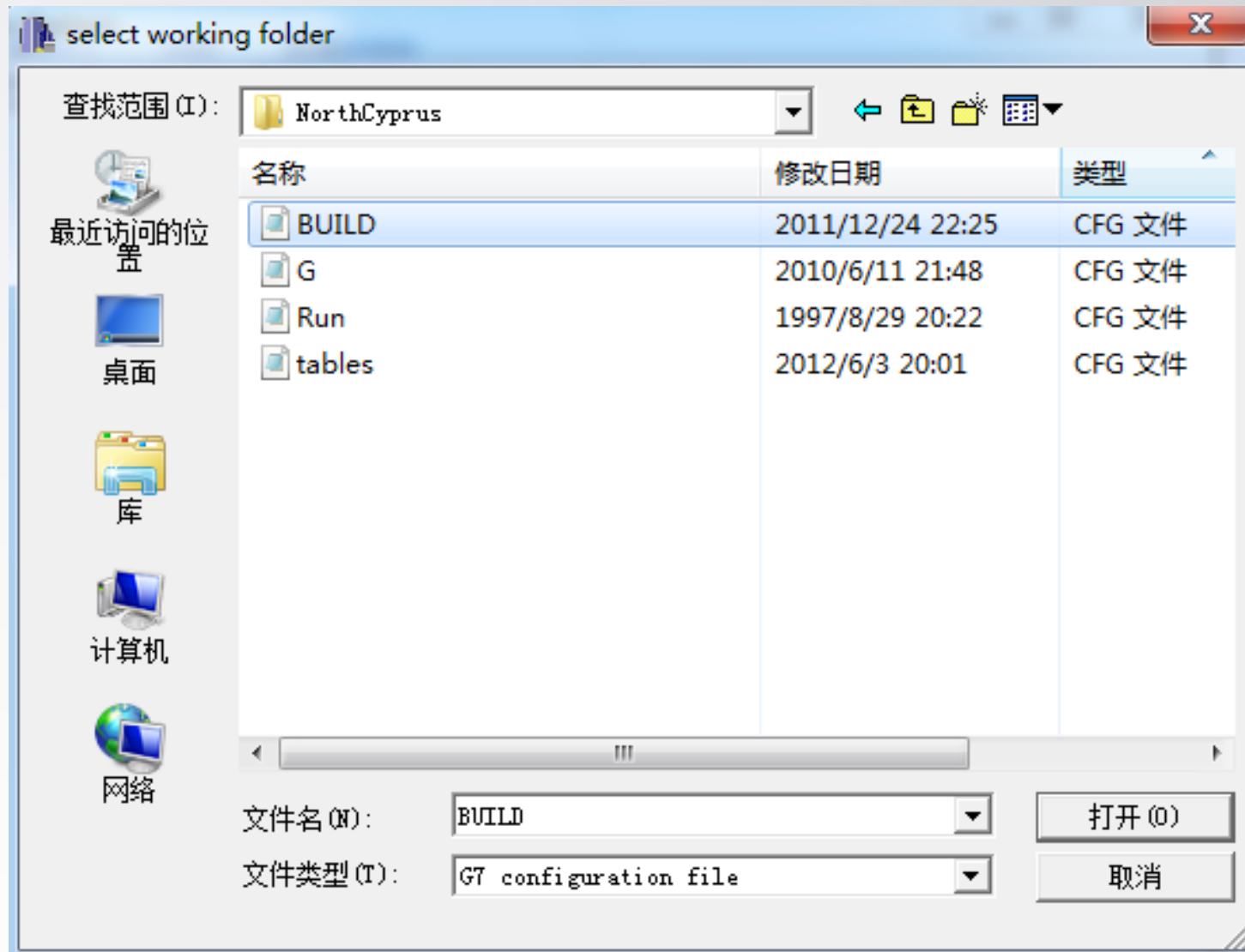
3. How is the current situation of the solution?

- 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”.

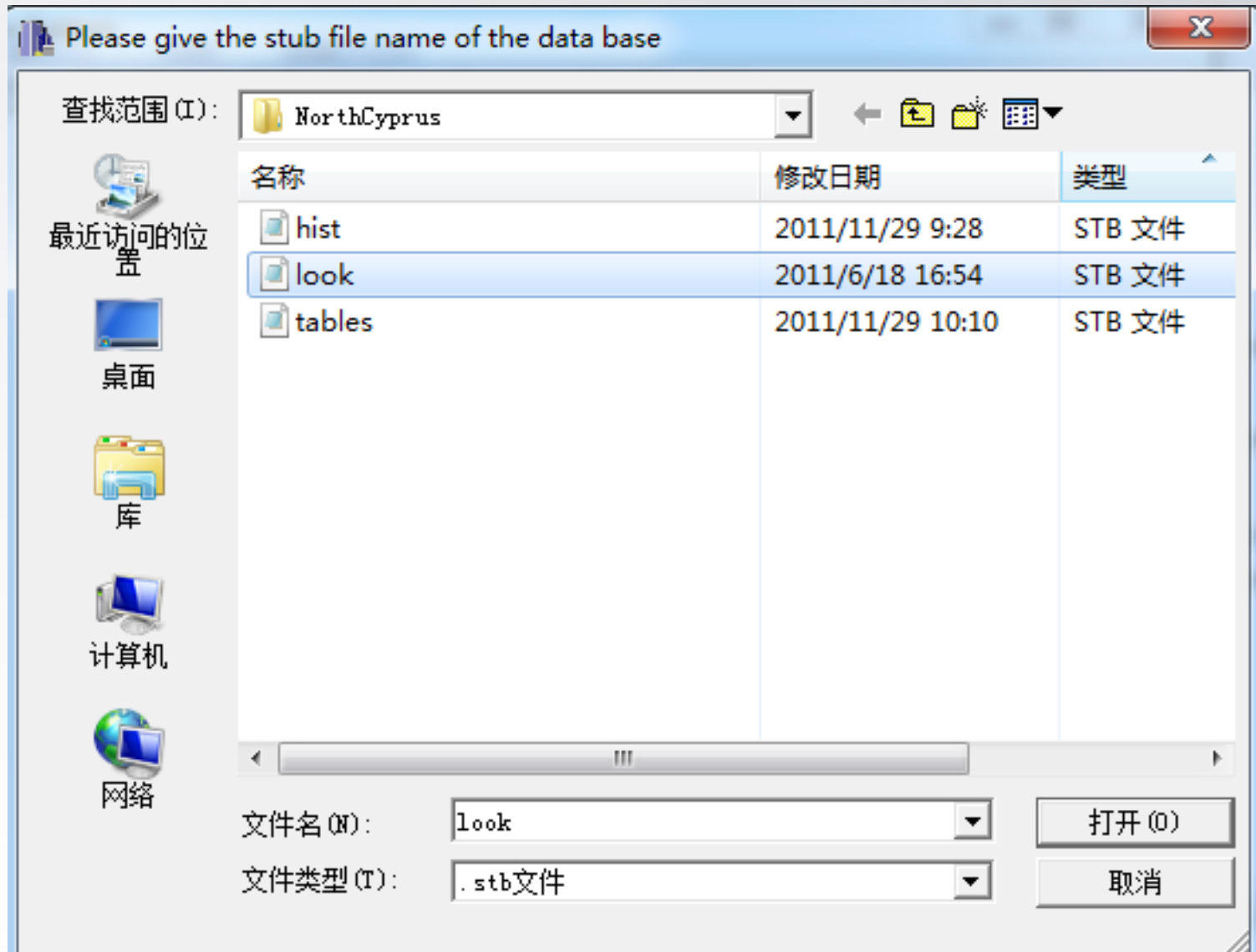
(1) Starting the system



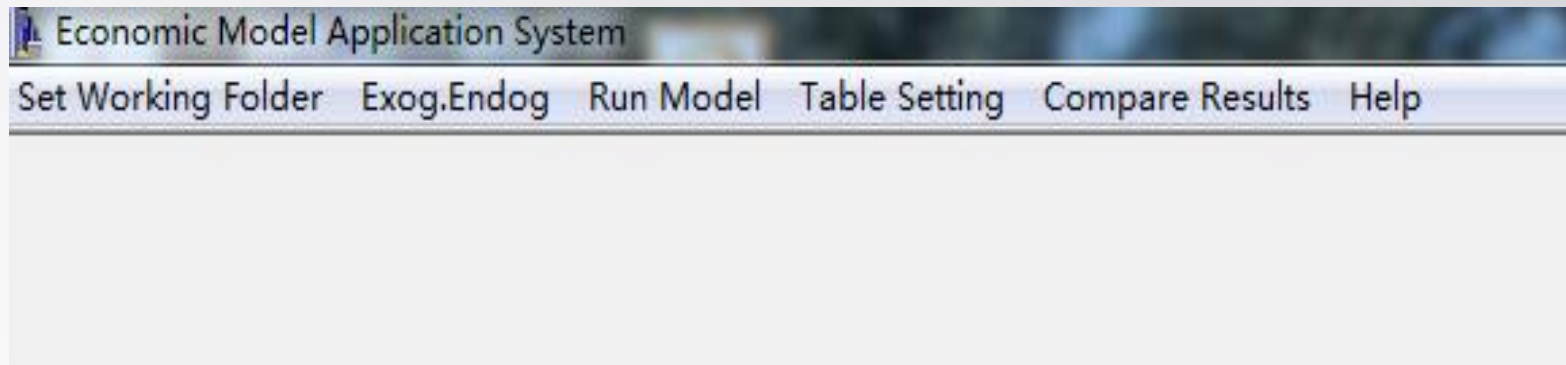
In the selected file folder, there has to be the file “build.cfg” which is one of the necessary files during the model building. Need "bws" information.



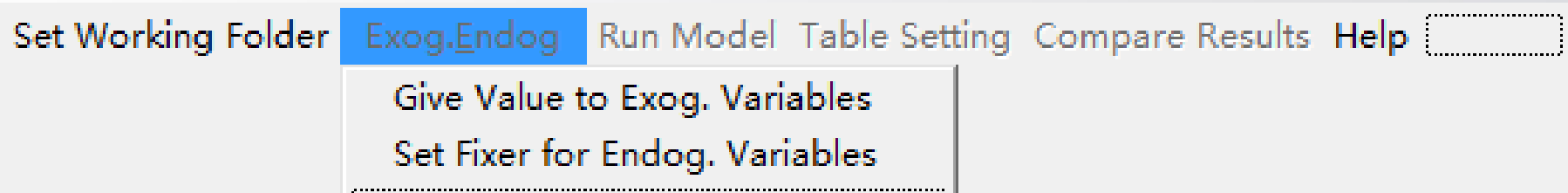
will ask the “stub” file which is necessary when displaying exogenous or endogenous variables.



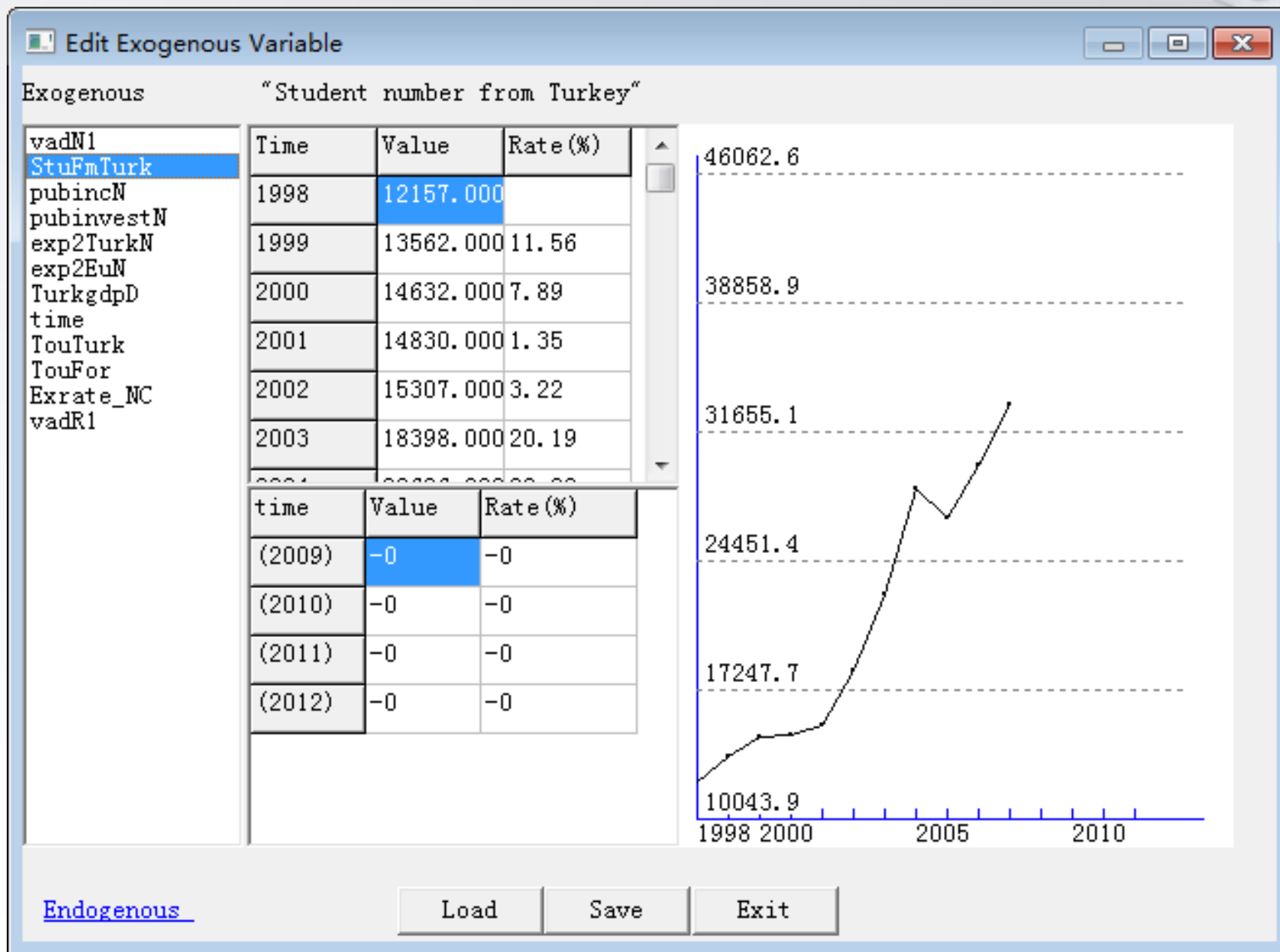
After the selection of “stub” file, the main menu of the system changed into following in which all the items of the main menu are bright or active.



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

endogenous Variable Adjustment

Endogenous Var. "Private income, current price"

privincN	period	Actual	Simulated	Error	Add	Mul	Replace	Skip
privconsN	1998	178883872						
TotStu	1999	296674112						
pubconsN	2000	546118400						
privinvestN	2001	938457472						
impN	2002	134330547						
expN	2003	162906265						
gdpN	2004	209228428						
gdpD	2005	258201216						
vadN2	2006	334538880						
vadN3								
vadN4								
vadN5								
vadN6								
vadN7								
vadN8								
vadN9								
vadN10								
vadD2								
vadD3								
vadD4								
vadD5								
vadD6								
vadD7								
vadD8								
vadD9								
vadD10								

Period	Add	Mul	Replace
(2009)			
(2010)			
(2011)			
(2012)			

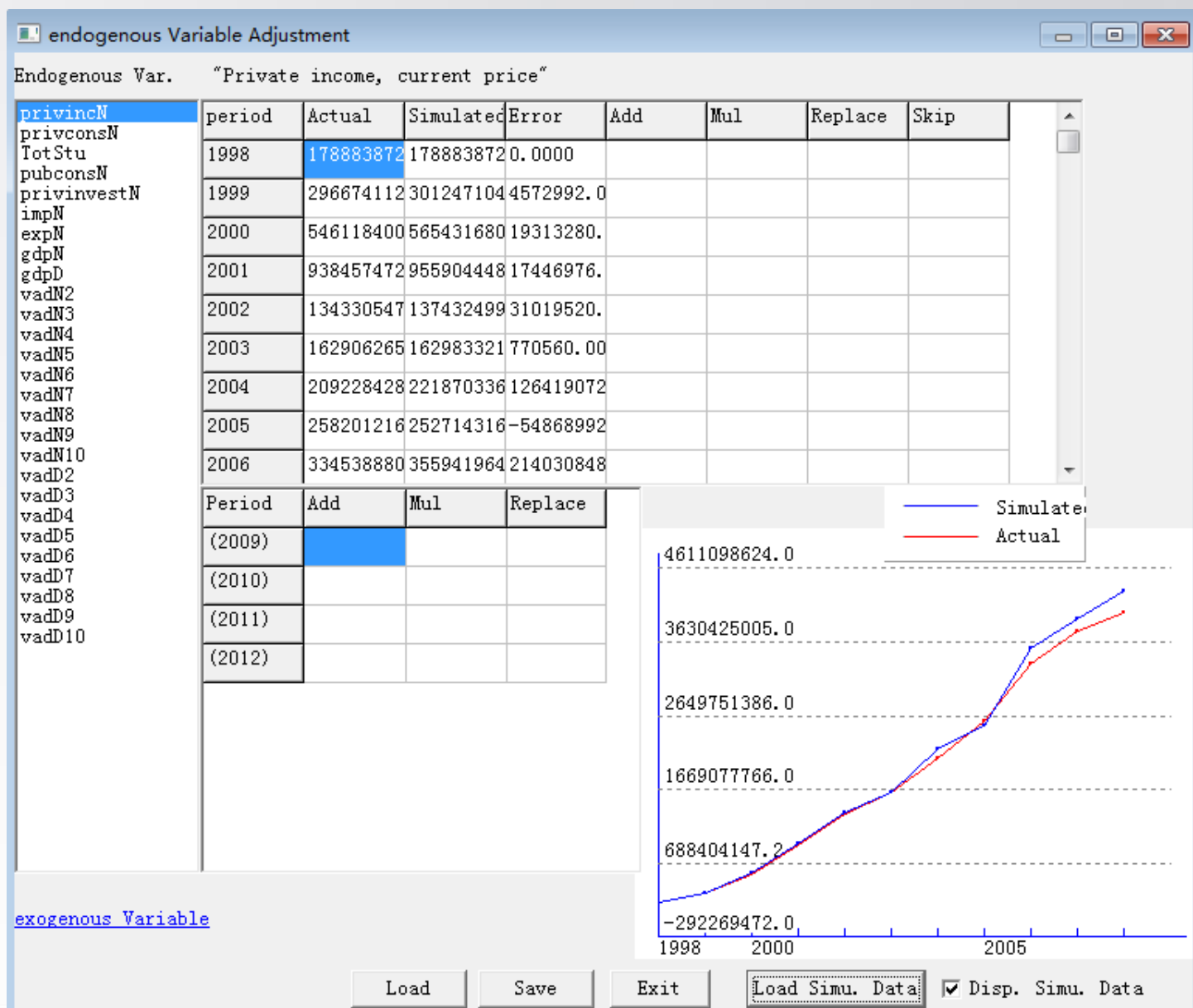
exogenous Variable

4611098624.0
3630425005.0
2649751386.0
1669077766.0
688404147.2
-292269472.0

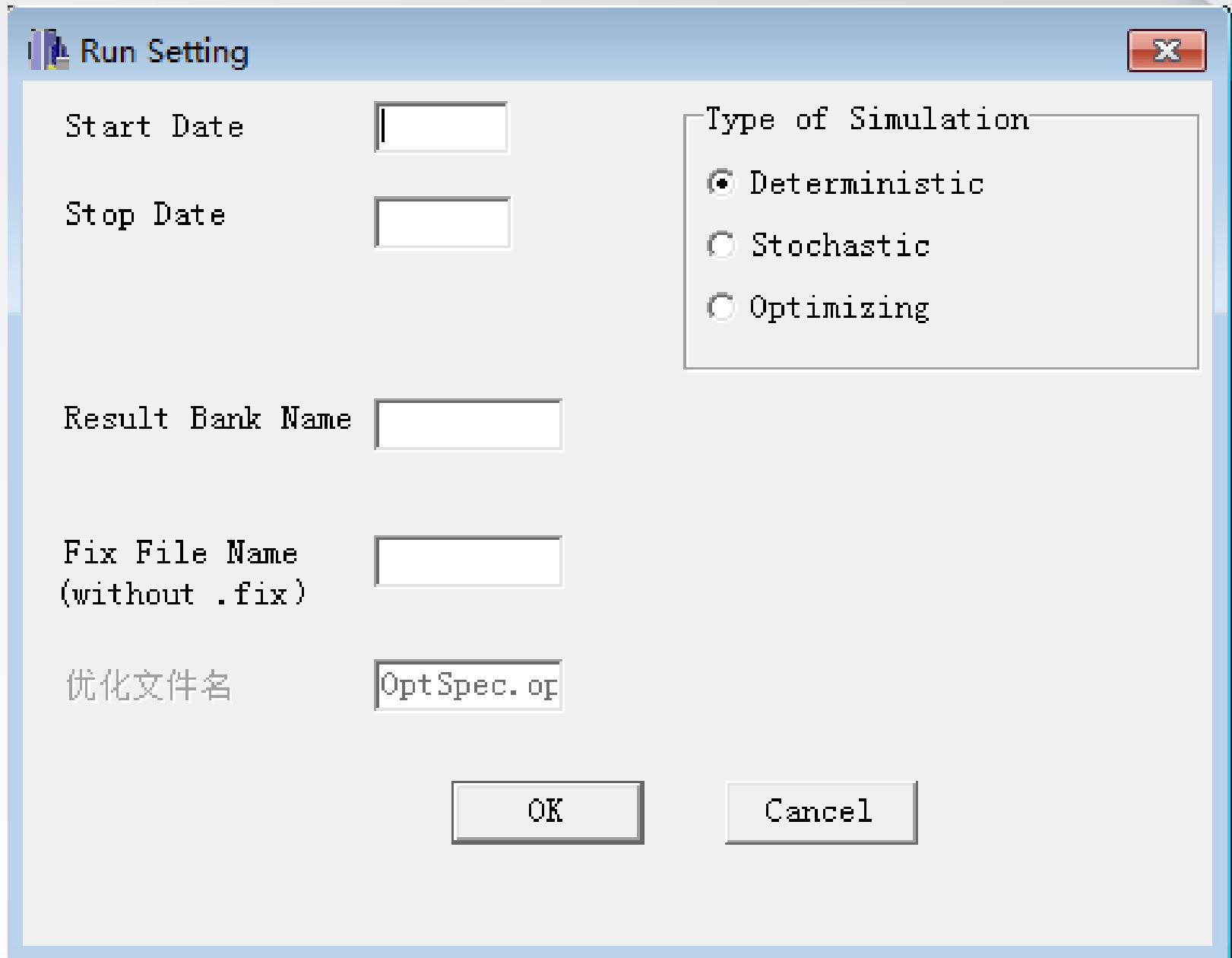
1998 2000 2005

Load Save Exit Load Simu. Data Disp. Simu. Data

Set fixer for endo. variables: with simulation results



Run model



The image shows a 'Run Setting' dialog box with a blue title bar and a close button (X) in the top right corner. The dialog contains several input fields and a radio button group. The fields are: 'Start Date' (empty), 'Stop Date' (empty), 'Result Bank Name' (empty), 'Fix File Name (without .fix)' (empty), and '优化文件名' (OptSpec.of). The 'Type of Simulation' section has three radio buttons: 'Deterministic' (selected), 'Stochastic', and 'Optimizing'. At the bottom are 'OK' and 'Cancel' buttons.

Run Setting

Start Date

Stop Date

Result Bank Name

Fix File Name
(without .fix)

优化文件名

Type of Simulation

Deterministic

Stochastic

Optimizing

OK Cancel

Set the Stub File for Results Comparison

Display Format Setting

Current .STB file

The dates to Display the results

The Sign below the Date line =

Line Number on a page 60

Number of Digits 7

Blank lines on top 3

Decimal digits 1

Blank lines at bottom 9

Title Simulation and Forecasting of Main Variables

gdpN: "gdp, current price"
gdpR: "gdp, constant price"
privincN: "Private income, current price"
privincR: "Private income, constant price"
pubincN: "public income, current price"
pubincR: "public income, constant price"
privconsN: "private consumption, current price"
privconsR: "private consumption, constant price"
pubconsN: "public consumption, current price"
pubconsR: "public consumption, constant price"
privinvestN: "private investment, current price"
privinvestR: "private investment, constant price"
pubinvestN: "public investment, current price"
pubinvestR: "public investment, constant price"

Up Down

+ - Modify

Creat Load Save Save as Exit

An Example of Setting Stub File

Display Format Setting

Current .STB file

The dates to Display the results

The Sign below the Date line =

Line Number on a page 60

Number of Digits 7

Blank lines on top 3

Decimal digits 1

Blank lines at bottom 9

Title Simulation and Forecasting of Main Variables

impFmOthN: "import from other countries"
exp2TurkR: "export to turkey, constant price"
exp2EuR: "export to EU, constant price"
exp2OthR: "export to other countries, constant price"
impFmTurkR: "import from Turkey, constant price"
impFmEuR: "import from EU, constant price"
impFmOthR: "import from other countries, constant price"
StuFmTurk: "Student number from Turkey"
StuFmOth: "Student number from other countries"
TotStu: "Total student number"
vadN1: "value added of sector 1, current price"
vadN2: "value added of sector 2, current price"
vadN3: "value added of sector 3, current price"

gdpR: "gdp, constant price"
privincN: "Private income, current price"
privincR: "Private income, constant price"
pubincN: "public income, current price"
gdpN/TotStu : "per student of GDP"

Up Down

gdpN/TotStu : "per student of GDP" + - Modify

Creat Load Save Save as Exit

The Interface for Result Comparison

指定库，输出格式文件和输出文件

Output Format file Name without .stb Output File Name

第2个及以后数据库数据显示为

Actual Dif Percantage

对每一个要取数的数据库填一行信息

	Bank Type	Bank Name		Bank Type	bank Name
1	<input type="text"/>	<input type="text"/>	6	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>	7	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>	8	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>	9	<input type="text"/>	<input type="text"/>
5	<input type="text"/>	<input type="text"/>	10	<input type="text"/>	<input type="text"/>

根据此表信息，系统将产生叫tables.cfg的文件。
也可以在运行比较程序之前再次编辑这个文件。

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!