

## Saving the Model (Routine Applications)

Often, TRAMO and SEATS – or TSW – are used periodically (monthly, quarterly) as new observations becomes available. In these cases it is usually desired to keep the model stable for some time. At present, it is possible to save the model obtained for each series in a particular application, so that it can be re-used in the forthcoming ones. It is possible to save the log/level transformation, model orders, position and type of outliers already identified, presence/absence of Trading Day and other calendar effects, and, if applicable, presence of other regression variables. The parameters can be re-estimated or kept also fixed.

To save the model(s) after an application (perhaps to many series), click in the icon ++MODEL, then select the “save options” (parameters fixed or re-estimated, or original input ), and save the new file containing the model(s) as an Xls or an Ascii file.

### Input From XLS File

The user can save the model directly in the XLS input file (more than one in general).

For each XLS sheet in any XLS File TSW will create:

- a new Sheet call “*sheetname* Models 6125895” with the saved models
- a set of “*sheetname* Regs# 6125895” with the regressions variables when  $iuser=-2,-1,1$ . We need more than one sheet due to the limit of 256 columns per sheet. It is possible to have more than one regression variable per series.

The correspondence between models and series is realized like:

Series  $\rightarrow$  (Sheetname,Column)  $\rightarrow$  (“*sheetname* Models 6125895”,Column).

**Recommendation:** The user should avoid baptizing the original XLS file sheet using our internal names “*sheetname* + Models 6125895”, “*sheetname* + Regs# 6125895”.

### Models Sheet

The model sheet format remembers the one of DOS Input file so using cut+paste the user can easily create a Dos input file.

Starting from  $n=0$  :

- row( $n$ )            **\$Input** *par-name=par-value, ... par-name=par-value, \$End*
- row( $n+1$ )        **\$Reg** *par-name=par-value, ... par-name=par-value, \$End*
- row( $n+2$ )
  - $k$  pairs of numbers (when  $iuser=0$ )
  - $k$  pairs of outlier definition (when  $iuser=2$ )
  - a list of unique regression variable names  $reg\#$   $reg\#+1$  ...  $reg\#+n$  (when  $iuser = -2,-1,1$ )

When Iter=1 the above structure can be repeated for each model defined.

### Regs Sheet

For each column there is a regression variable series. At row(0) the unique regression name as defined in the Models sheet (i.e. reg#) is defined. The correspondence Regression-name → Regression-series is by name.

### Ascii Model Save

In this case TSW creates an ascii file with the saved models. The structure of the file is:

“Series-Title”  
Input Namelist  
Reg Namelist  
Reg-data

Reg-Data as defined in DOS Input Format.

Note that the Reg-Data could be a regression series matrix when iuser=-2,-1,1.

The correspondence between models and series is realized by Series-Title. The unmatched models are discarded.

### What is saved

The program has three save options:

- 1) **Original Input** : *the input model, as entered by the user of the TSW interface;*
- 2) **Model** : *the model obtained running TSW (possibly, as a result of the automatic model identification procedure). What will be saved: all non-default parameters (except for RSA) and the parameters that have to be estimated, such as Itrad, Ieast, Lam, Imean, (p,d,q)(bp,bd,bq),and Outliers Detected.*
- 3) **Model + Parameters** : *as above plus the values for phi,th,bphi,bth;*

### Not Processed Series

If some series are not processed because of a run-time exception, not enough observations, too Many M.O., invalid frequency, too many End-Constant values, the Sheet Model relative column is empty (in ascii format the default model \$input \$End). At load time TSW will create a Default Input Model and a Warning Message Dialog informs the user.

### Note

“Change All” menu-entry shows the usual default parameter definition interface, clicking on OK will report the no-default parameters value on all models defined in the Series-Tree.