


Version 2.0 Backcast Facility Input File Specifications

The specifications below refer to items 3 and 7 in the enhancements/priority list:

 (Subject: Priority and IT cost; Database: Time Series Analysis WDB; Author: Mark Zhang; Created: 14/11/2006; Doc Ref: MZHG-6VHTMJ):

(1). Allow user to omit timepoints and spans from backcast diagnostic calculations.

(2). Options to handle post backcasted "marginal total" series in "hollow" aggregation structures to ensure additivity.

(1). Allow user to omit timepoints and spans from backcast diagnostic calculations.

In the current input configuration file for the backcast facility, we envisage adding a sixth column under the [SERIES] field to allow the user to specify single timepoints and/or subspans to omit from diagnostic calculations.

An example of this is shown in the following complete input configuration file. This example is not necessarily realistic.




ConfigFileV2.0.txt

A description of this new (sixth) column (as it appears in this file) is as follows:

```
##### (6) semi-colon separated list of timepoints or spans to omit in
##### backcast diagnostics (e.g. that may contain outliers or high
levels
##### of volatility). If unspecified, default is to use the the full
##### seasonally adjusted span up to the impact date. Here are some
##### examples on the specification of this field:
##### - to omit 1st qtr 2001, 3rd qtr 2003 and 2nd qtr 2004
timepoints:
##### "2001.1; 2003.3; 2004.2"
##### - to omit all timepoints within two subspans (endpoints
included):
##### "1995.2-1999.4; 1995.2-1999.4"
##### - to omit a mixture of single timepoints and subspans:
##### "2001.1; 2003.3; 1995.2-1999.4"
```

(2). Backcasted series in 'hollow' aggregation structures.

The full specifications were outlined by Mark Zhang in:  (Subject: Specs for hollow structure for backcast facility; Database: Time Series Analysis WDB; Author: Mark Zhang; Created: 14/11/2006; Doc Ref: MZHG-6VJ8JS). In a nutshell, the user should be able to choose the reconciliation option to use after backcasting the original series in the margins of a 'hollow' aggregation structure. That is, where the children series used for the marginal aggregate estimates do not exist in the system.

We have defined a new field in the input configuration file "[ADDITIVITY

RESTORATION IN HOLLOW STRUCTURES]", under which the user can specify three possible options (1, 2 or 3) for restoring the additivity after backcasting. Here is an example configuration file (same as above). The example in this file is not necessarily realistic.



ConfigFileV2.0.txt

A description of this new field (as it appears in this file) is as follows:

```
##### The following field is relevant only to series
##### that are part of a "hollow" two-dimensional
##### aggregation structure. See the backcasting manual
##### for details. There are three options:
##### (1) Marginal priority: pick a dimension to fix the original
#####      grand total. Reconcile additivity in other dimension.
##### (2) Grand total priority: fix the post-backcasted grand-total
#####      original (e.g. if directly adjusted or not backcasted).
#####      Marginal series in each dimension then reconciled.
##### (3) Proportional reconciliation: grand total original is
#####      computed from a weighted average of the marginal totals
#####      with specified weighting parameter. Marginal series in
#####      each dimension then reconciled.
##### If your aggregation structure is of the "hollow" 2D type, add
##### the correct specification below, otherwise, leaving it blank
##### will ignore this functionality and no additivity is enforced.
##### Here's the format for each option respectively:
##### (1) 1, <any component series in margin defining desired dimension>
##### (2) 2, <name of grand-total original>
##### (3) 3, <name of grand-total original>, <weighting parameter>

[ADDITIVITY RESTORATION IN HOLLOW STRUCTURES]
3, B2_299_OTHER.SERVICES, 0.5
```

The parameters for the actual reconciliation (post adjustment step) should be taken from those already set in TSUpdate from prior runs on the group. If reconciliation is turned off or was never previously performed, then defaults as already implemented in TSUpdate should be used (see also Mark Zhang's spec above).