

nag_tsa_transf_orders (g13byc)

1. Purpose

nag_tsa_transf_orders (g13byc) allocates memory to the four pointers in the structure of type **Nag_TransfOrder**. The structure is used to hold the transfer function model orders of the input series for some functions in Chapter g13. This function **must** be called before any attempt is made to access this structure.

2. Specification

```
#include <nag.h>
#include <nagg13.h>
```

```
void nag_tsa_transf_orders(Integer nseries, Nag_TransfOrder *transfv,
                          NagError *fail)
```

3. Description

The transfer function model orders of the input series are supplied to the time series routine in memory allocated to four pointers. These pointers are the constituent members of the structure of type **Nag_TransfOrder** used by some functions in Chapter g13.

The purpose of **nag_tsa_transf_orders** is to allocate memory to these four pointers.

4. Parameters

nseries

Input: the total number of input and output series. There may be any number of input series (including none), but always one output series.

(See **nag_tsa_multi_inp_model_estim (g13bec)** or **nag_tsa_multi_inp_model_forecast (g13bjc)** for details).

Constraint: **nseries** \geq 1.

transfv

Output: Pointer to structure of type **Nag_TransfOrder** with the following members:

b – Integer *

q – Integer *

p – Integer *

r – Integer *

Each of the pointers will have been allocated sufficient memory.

(See **nag_tsa_multi_inp_model_estim (g13bec)** or **nag_tsa_multi_inp_model_forecast (g13bjc)** for details).

fail

The NAG error parameter, see the Essential Introduction to the NAG C Library.

5. Error Indications and Warnings

NE_ALLOC_FAIL

Memory allocation failed.

NE_INT_ARG_LT

On entry, **nseries** must not be less than 1: **nseries** = *<value>*.

6. Further Comments

None.

7. See Also

nag_tsa_multi_inp_model_estim (g13bec)
nag_tsa_multi_inp_model_forecast (g13bjc)
nag_tsa_trans_free (g13bzc)

8. Example

See `nag_tsa_multi_inp_model_estim` (g13bec) and `nag_tsa_multi_inp_model_forecast` (g13bjc) for examples of how `nag_tsa_transf_orders` is used.
