

NDK_FARIMA_PARAM

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- C/C++
- .Net

```
int __stdcall NDK_FARIMA_PARAM(double * pData,
                               size_t  nSize,
                               double * mean,
                               double * sigma,
                               double  nIntegral,
                               double * phis,
                               size_t  p,
                               double * thetas,
                               size_t  q,
                               WORD  retType,
                               size_t  maxIter
                               )
```

Returns an array of cells for the initial (non-optimal), optimal or standard errors of the model's parameters.

Returns

status code of the operation

Return values

NDK_SUCCESS Operation successful

NDK_FAILED Operation unsuccessful. See [Macros](#) for full list.

Parameters

- [in] **pData** is the univariate time series data (a one dimensional array).
- [in] **nSize** is the number of observations in pData.
- [in,out] **mean** is the ARMA model mean (i.e. mu).
- [in,out] **sigma** is the standard deviation of the model's residuals/innovations.
- [in] **nIntegral** is the model's integration order.
- [in,out] **phis** are the parameters of the AR(p) component model (starting with the lowest lag).
- [in] **p** is the number of elements in phis (order of AR component)
- [in,out] **thetas** are the parameters of the MA(q) component model (starting with the lowest lag).
- [in] **q** is the number of elements in thetas (order of MA component)
- [in] **retType** is a switch to select the type of value returned: 1= Quick Guess, 2=Calibrated, 3= Std. Errors

Order Description

- | | |
|---|--|
| 1 | Quick guess (non-optimal) of parameters values (default) |
|---|--|

[in] **maxlter** 2 Calibrated (optimal) values for the model's parameters
3 Standard error of the parameters' values
is the maximum number of iterations used to calibrate the model. If missing or less than 100, the default maximum of 100 is assumed.

Remarks

1. The underlying model is described [here](#).
2. The time series is homogeneous or equally spaced
3. The time series may include missing values (e.g. NaN) at either end.

Requirements

| | |
|----------------|-----------|
| Header | SFSDK.H |
| Library | SFSDK.LIB |
| DLL | SFSDK.DLL |

Examples

References

- Hamilton, J .D.; [Time Series Analysis](#) , Princeton University Press (1994), ISBN 0-691-04289-6
Tsay, Ruey S.; [Analysis of Financial Time Series](#) John Wiley & SONS. (2005), ISBN 0-471-690740

See Also

[template("related")]
