

NDK_FARIMA_GOF

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- C/C++
- .Net

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

Computes the log-likelihood ((LLF), Akaike Information Criterion (AIC) or other goodness of fit function of the FARIMA model.

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] **mean** is the ARMA model mean (i.e. mu).

[in] **sigma** is the standard deviation of the model's residuals/innovations.

[in] **nIntegral** is the model's integration order.

[in] **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] **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 a fitness measure

| Order | Description |
|-------|-------------|
|-------|-------------|

| | |
|---|---|
| 1 | Log-Likelihood Function (LLF) (default) |
|---|---|

| | |
|---|------------------------------------|
| 2 | Akaike Information Criterion (AIC) |
|---|------------------------------------|

| | |
|---|--|
| 3 | Schwarz/Bayesian Information Criterion (SIC/BIC) |
|---|--|

| | |
|---|--|
| 4 | Hannan-Quinn information criterion (HQC) |
|---|--|

[out]**retVal** is the calculated GOF return value

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")]
