NDK_FARIMA_VALIDATE

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- C/C++
- .Net

int __stdcall NDK_FARIMA_VALIDATE (	double	mean,
	double	sigma,
	double	nIntegral,
	double *	phis,
	size_t	p,
	double *	thetas,
	size_t	q
)		

Examines the model's parameters for stability constraints (e.g. stationary, etc.).

Returns

status code of the operation

Return values

NDK_SUCCESS Operation successful

NDK_FAILED   Operation unsuccessful. See **Macros** for full list.

Parameters

[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 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)

Remarks

1. The underlying model is described here.
2. NDK_FARIMA_VALIDATE checks the FARIMA model for stability: stationarity, invertibility, and causality.
3. The integration order argument (d) must be a positive integer.
4. The long-run mean can take any value or may be omitted, in which case a zero value is assumed.

5. The residuals/innovations standard deviation (sigma) must be greater than zero.
6. For the input argument (phi):
   - The input argument is optional and can be omitted, in which case no AR component is included.
   - The order of the parameters starts with the lowest lag.
   - The order of the AR component model is solely determined by the order of the last value in the array with a numeric value (vs. missing or error).
7. For the input argument (theta):
   - The input argument is optional and can be omitted, in which case no MA component is included.
   - The order of the parameters starts with the lowest lag.
   - The order of the MA component model is solely determined by the order of the last value in the array with a numeric value (vs. missing or error).

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")]