NDK_RMD

Last Modified on 07/06/2016 11:17 am CDT

- C/C++
- .Net

```
int __stdcall NDK_RMD(double * X,
                      size_t   N,
                      WORD     reserved,
                      double * retVal
                     )
```

Returns the sample relative mean difference.

Returns

status code of the operation

Return values

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

Parameters

[in] **X** is the input data sample (a one/two dimensional array).
[in] **N** is the number of observations in X.
[in] **reserved** This parameter is reserved and must be 1.
[out] **retVal** is the calculated value of this function.

Remarks

1. The time series may include missing values (NaN), but they will not be included in the calculations.
2. The relative mean difference is defined in terms of the NDK_MD as follows:
$$\mathrm{RMD}= \frac{\mathrm{MD}}{\bar{x}}$$
Where:
- $\bar{x}$ is the sample mean (average) of the time series.
- MD is the mean difference of the time series.

3: The RMD is also equal to twice the NDK_GINI.

Requirements

Header	SFSDK.H
Library	SFSDK.LIB

DLL	SFSDK.DLL

Examples

NDK_RMD(double[] pData,
UIntPtr nSize,
short argMenthod,
ref double retVal
)

Namespace: NumXLAPI
Class: SFSDK
Scope: Public
Lifetime: Static

Returns the sample relative mean difference.

Return Value

a value from **NDK_RETCODE** enumeration for the status of the call.

NDK_SUCCESS operation successful
Error Error Code

Parameters

[in] **pData** is the input data sample (a one/two dimensional array).
[in] **nSize** is the number of observations in pData.
[in] **argMenthod** This parameter is reserved and must be 1.
[out] **retVal** is the calculated value of this function.

Remarks

1. The time series may include missing values (NaN), but they will not be included in the calculations.
2. The relative mean difference is defined in terms of the NDK_MD as follows:
\[\mathrm{RMD}= \frac{\mathrm{MD}}{\bar{x}}\]
Where:

- \(\bar{x}\) is the sample mean (average) of the time series.
- \(\mathrm{MD}\) is the mean difference of the time series.

3: The RMD is also equal to twice the NDK_GINI.

Exceptions

Exception Type	Condition
None	N/A

Requirements

Namespace	NumXLAPI
Class	SFSDK
Scope	Public
Lifetime	Static
Package	NumXLAPI.DLL

Examples

References

Hull, John C.; Options, Futures and Other DerivativesFinancial Times/ Prentice Hall (2011), ISBN 978-0132777421

See Also

[template("related")]