

NDK_PORTFOLIO_VARIANCE

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- [C/C++](#)
- [.Net](#)

```
int __stdcall NDK_PORTFOLIO_VARIANCE ( double * weights,  
                                       size_t   nAssets,  
                                       double ** covar,  
                                       double *  variance  
                                       )
```

Calculates the overall portfolio variance (volatility squared).

Returns

status code of the operation

Return values

NDK_SUCCESS Operation successful

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

Remarks

1. The weights array size must equal to the number of risky assets.
2. The assets order in must be identical in the covariance and assets weights arrays.
3. By definition, the covariance matrix is a square symmetric matrix with order equals to number of assets in the portfolio.
4. The number of unique elements in the covariance matrix is equal to: $\frac{N \times (N+1)}{2}$ Where (N) is the number of risky assets in the portfolio.

Requirements

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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
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See Also

[template("related")]