COMPINT

Updated: 31 Mar 2016

Use `COMPINT` to calculate the accrued interest for a security where interest is compounded periodically and paid at maturity.

$$\text{COMPINT} = \left(1 + \frac{\text{R}}{\text{M}}\right)^{\text{N}} * \left(1 + \frac{\text{R}}{\text{M}} * \frac{\text{A}}{\text{E}}\right) - 1$$

Where:

R = the coupon interest rate as a decimal
M = the number of compounding periods per year
N = the number of whole coupons prior to the settlement date
A = the number of accrued days in the coupon period in which the settlement occurs
E = the number of days as specified by the basis code for the coupon period in which the settlement occurs.

Syntax

```
Public Shared Function COMPINT(
    ByVal Basis As String,
    ByVal Rate As Double,
    ByVal IssueDate As Date,
    ByVal Settlement As Date,
    ByVal Maturity As Date,
    ByVal CompFreq As Integer,)
```

Arguments

Basis

is the type of day count to use. *@Basis* is an expression of the character string data type category.

Basis	Day count basis
0	US (NASD) 30/360
1	Actual/Actual
2	Actual/360
3	Actual/365
4	European 30/360

Basis is an expression that returns a **String**, or of a type that can be implicitly converted to **String**.

Rate

the coupon rate of the security expressed in decimal terms. *Rate* is an expression that returns a **Double**, or of a type that can be implicitly converted to **Double**.

IssueDate

the issue date of the security; the first interest accrual date. *IssueDate* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

Settlement

the settlement date occurring within a coupon period of the security; interest is accrued from IssueDate through to Settlement. *Settlement* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

Maturity

the maturity date of the bond. @Maturity is used to determine the coupon dates. *Maturity* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

CompFreq

the number of times the coupon is compounded annually. For annual compounding,*CompFreq* = 1; for semi-annual, *CompFreq* = 2; for quarterly, *CompFreq* = 4, and for monthly, *CompFreq = 12*. *CompFreq* is an expression that returns a **Integer**, or of a type that can be implicitly converted to **Integer**.

Return Type

Double

Remarks

- If *CompFreq* not 1, 2, 4, or 12 an error will be returned.
- *Issuedate* <= *Settlement* <= *Maturity*.
- For bonds with an odd first or an odd last coupon period (or both), use ODDCOMPINT.
- COMPINT returns a factor. To calculate the monetary value of the accrued interest, you should multiply this factor by the face amount of the bond.

See Also

- ACCINTACT - Accrued interest where coupon amounts are based on number of days in the coupon period
- ACCRINT - Accrued Interest
- ACCRINTM - Accrued Interest at Maturity
- AIFACTOR - Accrued Interest Factor
- AIFACTOR_IAM - Accrued Interest Factor, Interest at Maturity
- AIFACTOR_OFC - Accrued Interest Factor, Odd First Coupon
- AIFACTOR_OLC - Accrued Interest Factor, Odd Last Coupon
- AIFACTOR_RPI - Accrued Interest Factor, Regular Periodic Interest
- BONDINT - Accrued Interest on a Bond

- ODDCOMPINT - Accrued interest for a security with an odd first or odd last coupon period
- ODDFINT - Accrued interest for a bond with an odd first coupon
- ODDLINT - Accrued interest for a bond with an odd last coupon
- STEPACCINT - Accrued interest of a stepped-coupon bond