

ODDCOMPINT

Updated: 31 Mar 2016

Use **ODDCOMPINT** to calculate the accrued interest for a security with an odd first or an odd last coupon period (or both) where interest is compounded periodically and paid at maturity. If the settlement date is less than or equal to the first coupon date, then the accrued interest is the same as the value returned by **AIFCATOR_OF**.

If the settlement date is greater than the first coupon date and less than the last coupon date or the last coupon date is than the accrued interest is

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

If the settlement date is greater than the last coupon date, then accrued interest is

$$\text{ODDCOMPINT} = (1 + C_{\text{odd}}) * \left(1 + \frac{R}{M}\right)^N * (1 + A_{\text{last}}) - 1$$

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.

C_{odd} = the accrued interest factor as calculated by **AIFACTOR_OF**.

A_{last} = the accrued interest factor as calculated by **AIFACTOR_OL**.

Syntax

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

Arguments

Basis

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

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

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

FirstCouponDate

for bonds with an odd first coupon amount, the date of the coupon payment.

FirstCouponDate should only be used when the first interest payment is calculated and compounded on a date other than a regular, periodic coupon date. If *LastCouponDate* is NULL, then the coupon dates are calculated backwards from *Maturity*, otherwise *LastCouponDate* is used to calculate the coupon dates. *FirstCouponDate* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

LastCouponDate

for bonds with an odd last coupon amount, the last regular coupon date. *LastCouponDate* should only be used when the last interest payment is calculated from a start date other than a regular, periodic coupon date calculated backwards from *Maturity*. *LastCouponDate* 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 are 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 an **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.
- IssueDate < FirstCouponDate < LastCouponDate < Maturity
- For bonds with regular coupon payments, use COMPINT.
- ODDCOMPINT 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 for an Interest-at-Maturity security
- AIFACTOR - Accrued Interest Factor
- AIFACTOR_IAM - Accrued Interest Factor, Interest at Maturity
- AIFACTOR_OFCC - 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
- COMPINT - Accrued interest for a security where interest is compounded periodically and paid at maturity.
- 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