

INTERPDFACT

Updated: 31 Mar 2016

Use **INTERPDFACT** to calculate interpolated discount factors for a range of dates. **INTERPDFACT** uses the following formula in its calculation.

$$df = df_1^{(1-\alpha)*d/d_1} * df_2^{\alpha*d/d_2}$$

$$\alpha = \frac{d - d_1}{d_2 - d_1}$$

Where

- d number of days from *StartDate* to the interpolated date
- d₁ number of days from *StartDate* to the greatest discount factor date less than or equal to the interpolated date
- d₂ number of days from *StartDate* to the lowest discount factor date greater than the interpolated date
- df₁ discount factor for d₁
- df₂ discount factor for d₂

Syntax

```
Public Shared Function INTERPDFACT(  
    ByVal InputData_RangeQuery As String,  
    ByVal iStartDate As Date,  
    ByVal iEndDate As Date,  
    ByVal Startdate As Date,)
```

Arguments

InputData_RangeQuery

a T-SQL statement, as a string, that specifies the discount factors and their associated dates.

InputData_RangeQuery is an expression that returns a **String**, or of a type that can be implicitly converted to **{paramtype}**.

iStartDate

the start date of the interpolation date range. *iStartDate* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

iEndDate

the end date of the interpolation date range. *iEndDate* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

Startdate

the starting date used in the calculation of the discount factors. *Startdate* is an expression that returns a **Date**, or of a type that can be implicitly converted to **Date**.

Return Type

FinancialTypes.INTERPDFACT_table

```
Class INTERPDFACT_table
  Inherits Data.DataTable
  Property Item(RowIndex As Integer) As FinancialTypes.OutputRow_INTERPDFACT
```

```
Class OutputRow_INTERPDFACT
  Public vDate As Date
  Public DF As Double
  Public ZC As Double
  Public CC As Double
End Class
```

Column	Description
vDate	The interpolated date.
DF	Discount factor.
ZC	Zero coupon rate.
CC	Continuously compounded zero coupon rate.

Remarks

- The function is insensitive to order; it does not matter what order the dates and rates are passed in.
- If *StartDate* is NULL it defaults to current system date.
- If *iStartDate* and *iEndDate* are NULL, then the function will return the interpolated discount factor for every date from the start of the yield curve to the end.

See Also

- DFINTERP - Interpolated discount factor
- ED_FUT_CONV_ADJ_HL - Convert Eurodollars futures price to forward rate using Ho Lee convexity adjustment
- SWAPCURVE - Discount factors from a series of cash, futures, and swaps rates
- ZEROCOUPON - Interpolated zero-coupon rate from a series of cash, futures, or swaps rates