

How do I use the ACCRINT function in Excel to calculate accrued interest for a financial instrument?

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The ACCRINT function in Excel is a useful tool for calculating accrued interest for financial instruments such as bonds or loans. To use this function, first, ensure that the dates for the settlement, purchase, and maturity of the financial instrument are entered correctly in the designated cells. Then, specify the annual coupon rate, the number of coupon payments per year, and the number of days in the coupon period. Finally, input the par value and the accrued start date for the financial instrument. The ACCRINT function will then calculate the accrued interest up until the current date. This function is a valuable tool for accurately tracking and managing accruing interest for financial instruments in Excel.

This article describes the formula syntax and usage of the **ACCRINT** function in Microsoft Excel.

Description

Returns the accrued interest for a security that pays periodic interest.

Syntax

ACCRINT(issue, first_interest, settlement, rate, par, frequency, ,)

Important: Dates should be entered by using the DATE function, or as results of other formulas or functions. For example, use DATE(2008,5,23) for the 23rd day of May, 2008. Problems can occur if dates are entered as text.

The ACCRINT function syntax has the following arguments:

Issue Required. The security's issue date.

First_interest Required. The security's first interest date.

Settlement Required. The security's settlement date. The security settlement date is the date after the issue date when the security is traded to the buyer.

Rate Required. The security's annual coupon rate.

Par Required. The security's par value. If you omit par, ACCRINT uses \$1,000.

Frequency Required. The number of coupon payments per year. For annual payments, frequency = 1; for semiannual, frequency = 2; for quarterly, frequency = 4.

Basis Optional. The type of day count basis to use.

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

Calc_method Optional. A logical value that specifies the way to calculate the total accrued interest when the date of settlement is later than the date of first_interest. A value of TRUE (1) returns the total accrued interest from issue to settlement. A value of FALSE (0) returns the accrued interest from first_interest to settlement. If you do not enter the argument, it defaults to TRUE.

Remarks

Microsoft Excel stores dates as sequential serial numbers so they can be used in calculations. By default, January 1, 1900 is serial number 1, and January 1, 2008 is serial number 39448 because it is 39,448 days after January 1, 1900.

Issue, first_interest, settlement, frequency, and basis are truncated to integers.

If issue, first_interest, or settlement is not a valid date, ACCRINT returns the #VALUE! error value.

If rate ≤ 0 or if par ≤ 0 , ACCRINT returns the #NUM! error value.

If frequency is any number other than 1, 2, or 4, ACCRINT returns the #NUM! error value.

If basis < 0 or if basis > 4 , ACCRINT returns the #NUM! error value.

If issue \geq settlement, ACCRINT returns the #NUM! error value.

ACCRINT is calculated as follows:

$$ACCRINT = par \times \frac{rate}{frequency} \times \sum_{i=1}^{NC} \frac{A_i}{NL_i}$$

where:

A_i = number of accrued days for the i th quasi-coupon period within odd period.

NC = number of quasi-coupon periods that fit in odd period. If this number contains a fraction, raise

it to the next whole number.

NLi = normal length in days of the quasi-coupon period within odd period.

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