How do I use the TBILLPRICE function in Excel to calculate the price of a Treasury bill?

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The TBILLPRICE function in Excel is a useful tool for calculating the price of a Treasury bill. To use this function, first select the cell where you want the price to appear. Then, enter the formula "=TBILLPRICE(settlement, maturity, rate)" where settlement represents the date the bill was issued, maturity is the date it will mature, and rate is the annual discount rate. This formula will return the price of the Treasury bill as a decimal value. It is important to note that the dates must be entered in the correct format and the rate should be in decimal form, not percentage. This function is helpful for investors and financial professionals looking to accurately calculate the price of a Treasury bill in their Excel spreadsheets.

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

Description

Returns the price per $100 face value for a Treasury bill.

Syntax

TBILLPRICE(settlement, maturity, discount)

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 TBILLPRICE function syntax has the following arguments:

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

Maturity Required. The Treasury bill's maturity date. The maturity date is the date when the Treasury bill expires.

Discount Required. The Treasury bill's discount rate.

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.

Settlement and maturity are truncated to integers.

If settlement or maturity is not a valid date, TBILLPRICE returns the #VALUE! error value.

If discount ≤ 0, TBILLPRICE returns the #NUM! error value.

If settlement > maturity, or if maturity is more than one year after settlement, TBILLPRICE returns the #NUM! error value.

TBILLPRICE is calculated as follows:

$$TBILLPRICE = 100 \times (1 - \frac{discount \times DSM}{360})$$

where:

DSM = number of days from settlement to maturity, excluding any maturity date that is more than one calendar year after the settlement date.