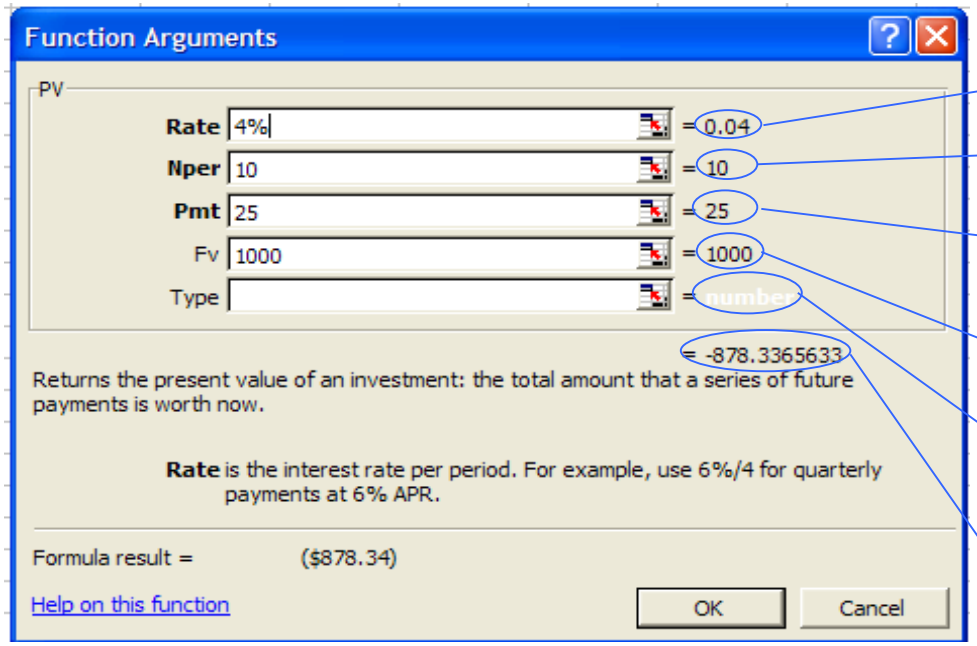
Bond Valuation using Excel

Bonds can be easily calculated using the Present Value function in Excel. This function is labeled PV and stored under the financial category. The inputs are similar to a financial calculator.

Bond Valuation Example:

Calculate the value of a 5 year bond compounded semiannually with a face value of $1000, 5% coupon, and an 8% yield.



Rate is the yield of the bond per period. In the case of this bond it has a annual yield of 8% and a semiannual yield of 4%.

Nper is the total number of periods. This is a 5 year bond compounded semiannually, therefore there are 10 periods.

Pmt is the coupon payment per period. This bond has an annual coupon payment of 5% or $50 and a semiannual coupon of 2.5% or $25.

Fv is the future value or face value of the bond. This bond has a face value of $1000.

Type is used to define the timing of the payments. If the payments are made at the beginning of the period enter 1. If the payments come at the end of the period leave blank or enter 0. Coupon payments typically come at the end of the period.

Note that the present value is negative while the payment and future values are positive. The present value is negative because this is a payment for the bond, and the future value and payments are positive because these are payments you receive.