

Discussion 2

Assume interest rates for bonds today is 5% for an AAA rated bond.
Calculate the price of the bond you have selected relative to the 5%.

FEDERAL HOME LN MTG CORP MTN issues bonds with coupons.

Price \$112.62 Coupon 5.680% YTM 4.369% CYield 5.043%
Callable

$$PV_0 = \left(\frac{\text{coupon}}{R} \right) (1 - [1 / (1 + r)^m]) + \left(\frac{\text{par value}}{(1 + r)^m} \right)$$

$$PV_0 = \left(\frac{\$56.80}{.05} \right) (1 - [1 / (1 + .05)^{30}]) + \left(\frac{\$1,000}{(1 + .05)^{30}} \right)$$

$$PV_0 = \left(\frac{\$56.80}{.05} \right) (1 - [1 / (1.05)^{30}]) + \left(\frac{\$1,000}{(1.05)^{30}} \right)$$

$$PV_0 = \left(\frac{\$56.80}{.05} \right) (1 - [1 / 4.32194237515]) + \left(\frac{\$1,000}{4.32194237515} \right)$$

$$PV_0 = \left(\frac{\$56.80}{.05} \right) (1 - .2313774486558936) + 231.3774486558936$$

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$$PV_0 = (\$56.80) (0.768225513441064) + 231.3774486558936$$

$$PV_0 = \frac{43.63520916345244}{.05} + 231.3774486558936$$

$$PV_0 = 872.7041832690487 + 231.3774486558936$$

$$PV_0 = \$1,104.08$$

Is the bond selling at a premium or a discount? Why? Be sure to show how you arrived at your answer.

Using calculations relating to 5% - this bond is selling above premium ($\$1,104.08 > \$1,000$).

What other factors may influence the value of a bond?

Certain factors that could possibly influence the value of a bond are their credit ratings. AAA interest are a better valuation of a bond because of the fact that it is a higher credit rating than the other credit ratings out there, followed by economic situations and inflation.