Bonds: Current Yield

General Formula

$$\text{Current Yield (CY)} = \frac{\text{Annual Interest Payment}}{\text{Current Bond Price}}$$

EXAMPLE 1:

AT PAR BOND

- $30 Interest payment
- Bond Price = $1000

CY = 30/1000 = 3.0%

EXAMPLE 2:

DISCOUNT BOND

- $30 Interest payment
- Bond Price = $950

CY = 30/950 = 3.16%

EXAMPLE 3:

PREMIUM BOND

- $30 Interest payment
- Bond Price = $1100

CY = 30/1100 = 2.73%

Appendix 1 : Notes

- The formula for ***current yield*** is defined by dividing the dollar amount of the coupon rate by the current price.
    - CY = Annual interest payment / Current Bond Price

WHY IT MATTERS:
- The important thing to note here is that for most fixed rate bonds, the stated coupon rate will remain the same (in this case, 3%).
- However, as the prevailing level of interest rates changes over time, the return that investors will require (the current yield) in order to hold a specific bond will fluctuate.
- As a result, investors will send bond prices higher or lower until the current yield on that bond is equivalent to other securities with similar characteristics.

Appendix 2

General Formula

Current Yield (CY) =

$$\dfrac{\left(C + \dfrac{(F + P)}{n} \right)}{2} \div \dfrac{(F + P)}{2}$$

C	= Coupon / Interest Payment	**F**	= Face Value
n	= years to maturity	**P**	= Price

Appendix 2: Notes

- ***Yield to Maturity (YTM)***, expressed as an annual rate, is the overall rate of return to a bond investor who buys a bond today at market price, with the assumption that:
    - the bond will be held to maturity; and
    - all coupon and principal payments will be made on schedule.
- Bonds trade on the open market, so the actual yield an investor receives if they purchase a bond after its issue date (the "yield to maturity") is different than the coupon rate.
- The calculation for ***YTM*** is complex because it splits the price of a bond into 2 components:
    - The Present Value (PV) of the bond's coupon payments; and
    - The Present Value (PV) of the bond's par or face value.
- Most people use a calculator for this one because of the complexity!!
    - *WHY IT MATTERS:*
- YTM allows investors to compare a bond's expected return with those of other securities. Understanding how yields vary with market prices (that as bond prices fall, yields rise; and as bond prices rise, yields fall) also helps investors anticipate the effects of market changes on their portfolios. Further, YTM helps investors answer questions such as whether a 10-year bond with a high yield is better than a 5-year bond with a high coupon.