

Bond Analysis

Through analyzing Wal-Mart stores (Corporate) outstanding bonds we have reviewed two bonds that are bullet bonds with, a maturity of 7 years (mature in 2020), and a credit rating of AA according to the average between Moody's, S&P, and Fitch (this indicates minimal credit risk).

Bond 1(B)

Bond 1(B) is a corporate bond that matures on July 8th, 2020, with a coupon rate of 3.625%. Coupons are paid semi-annually. There are only 8 years left until maturity so the expected cash flows would be 15 payments of \$18,125.00 plus the par value and interest at maturity of \$1,018,125.00. The total return of this bond as of December 7, 2012 is -4.19% (with a 50 basis point shift in yield).

Bond 2(A)

Bond 2(A) is a corporate bond that matures on October 25th, 2020 with a coupon rate of 3.250%. Coupons are paid semi-annually. Since this bond matures in the same year as Bond 1(B), there are only 8 years left until maturity. The expected cash flows are 15 payments of \$16,250.00 plus the par value and interest paid at maturity of \$1,016,250.00. The total return of this bond as of December 7, 2012 is -4.44 % (with a 50 basis point change in yield).

Though both bonds are holding negative total returns today, last week they were around 1.91. This shows that the total yields have been declining. Bond 1(B) has a higher total return than Bond 2(A) showing the investors may want to invest in bond 1(B) to get more return even though it is at -4.19%.

Convexity and Duration: Bond 1 vs. Bond 2

Fixed Income Project-WMT

Duration shows the level of interest rate risk or reward that a bond has relative to other bonds. The higher the duration, the greater the interest rate risk or reward. Bond 1(B) has duration of 6.659 and Bond 2(A) has duration of 7.026. These duration values indicate that Bond 2(A) has a greater interest rate risk ~~then~~ than Bond 1(B). Bond 2(A) will continue to gain as long as interest rates decline, this is because the bondholder is earning a fixed rate. Therefore as interest rates increase it may push investors to other bonds with higher coupon rates.

Due to the current uncertain economic times, bond 1(B) is more desirable due to its higher interest rate (coupon) with less risk (lower duration). Investors may be reluctant to take high amounts of investment risk (risk that the investments/bonds value will change due to a change in any interest rates, spread between two rates, or yield curve) due to economic uncertainties such as the “fiscal cliff” and the Greece bailout.

The convexity of a bond indicates the level of market risk that a portfolio of bonds may be exposed to. The higher the coupon rate, the lower the convexity (or market risk) of a bond. This is because market rates would have to vastly increase to surpass the coupon on the bond, meaning there is less risk to the investor. As of December 7, 2012, Bond 1(B) has a convexity of .507(50.7%) and Bond 2(A) has a convexity of .555(55.5%). This data designates that Bond 2(A) has a higher convexity or market risk. This is shown in the chart below:

Bond A=Bond 2(A), Bond B=Bond 1(B)

