

Home products: stock and bond valuation essay sample



**ASSIGN
BUSTER**

This case discusses the valuation of stocks and bonds. It says that in textbooks, the valuation of stocks and bonds is simply stated as the present value of all the future cash flows expected from the security. The concept is logical, straightforward, and simple. The valuation of bonds is usually presented first, since the relatively certain cash flows are broken into an annuity and a payment of the par value at some specific date in the future. Preferred stock valuation follows bond valuation and the value of preferred stock is shown to be the present value of perpetual annuity. The cash flows from the constant-size dividend are fairly certain, and most preferred stocks do not have a maturity date. Finally, common stock is presented but neither the future cash flows (from dividends) nor the final value is known with any degree of certainty.

The case describes Home Products, Inc, a leading manufacturer of prescription and ethical drugs; specialty foods and candies; and proprietary drugs. Total revenues in the last fiscal year were in excess of \$9 billion. Company's capital structure is made up of 34% long-term debt, 3% preferred stock, and 63% common stock. The case describes the two largest domestic long-term debt, and close this issue disclosing that these two bonds are rated A by Moody's. Then, it talks about preferred stocks. 5.5 million shares were issued in Feb. 1979 in connection with the merger of FDS Holding Company onto a subsidiary of HPI. Finally, it describes the common stock and informed that returns from common stocks come from the cash dividend payment and /or changes in the price of the stock. Two major factors that affect the price of stock are changes in the required rate of return, caused

primarily by changes in risk, and change in the growth rate of earnings, which in return create changes in growth rate dividends.

Questions:

1. Look at the 9 1/8 % coupon bond. What is its current yield, its yield-to-first call, and its yield-to-maturity?

Current Yield = Annual Coupon Interest / Price = 9.125 / \$930 = 9.81%

Yield-to-first call (7 years):

PV = \$930; FV = \$1,044.375; N = 14 Yield-to-first call = 11.023%

Yield to Maturity (26 years):

PV = \$930; FV = \$1,000; Coupon = (9.125/2)1000 = 45.625; N = 52

Yield to Maturity = 9.88%

2. Do you think this bond will be called? Why or why not?

No, this bond will not be called by the company cause it is better for them to pay 9.88% YTM rather than 11.023%, for Yield-to-first call.

3. What would be the value of the 9 1/8 % coupon bond if the time to maturity was 10 years rather than 26 years? Can you explain why your answer is correct?

PV = \$930; FV = \$1,000; N = 20; PMT = 45.625 Yield = 10.26%

4. What is the required rate of return for the preferred stock? How this rate compare to the YTM for the HPI 9 1/8 % bond? Is this difference what you would have expected from a risk / return standpoint? Why or why not?

$$\text{RRR} = \text{Cumm. Preferred Div.} / \text{Preferred Stock Price} = \$2.75 / \$30 = 9.17\%$$

The bond 9.88% is more attractive for the investor than a 9.17% preferred stock. This is contrary to what we would have expected cause the bonds should have lower yields due to lower risks.

5. In the event of liquidation, HPI preferred stockholders are entitled to \$30.50 plus accrued dividends. Does this mean that preferred stockholders will receive that amount?

No, in the event of liquidation, i. e. bankruptcy, the collection hierarchy starts with creditors and bonds, then stocks. Stockholders, preferred and common will distribute residual gains. Preferred stock, claims senior to common stock, junior to debt.

6. What is dividend yield and the expected capital gains yield for HPI common stock?

$$\text{PV} = 40.625; \text{PMT} = .385$$

$$\text{Dividend} / \text{Price} = (.385 * 4) / 40.625 = 3.79\%$$

$$g = 9.7\%$$

7. Given that HPI is selling for \$40 5/8, what is its required rate of return? (Use the constant growth valuation model.)

$$P_0 = (1+g) D_0 / (r - g)$$

$$40.625 = 1.6894 / (X - 0.097)$$

$$40.625 X - 3.9406 - 1.6894; 40.625 X - 5.63 = 13.86\%$$