

# Sunday, November 16, 2008

## The Debt Effect

Lets talk about debt and how it should play into ones thinking when examining the true value of a stock or company. In a previous post, I have pointed out the need to consider total capitalization (equity + debt) in evaluating a P/E ratio. Here is an analogy that should help clear up these muddy waters.

Suppose I own an apartment complex that generates \$60,000 a year in gross rental income. Further, lets assume that my annual operating expenses (maintenance, taxes, insurance, etc.) total \$10,000, so my income before taxes, interest, and depreciation (EBITDA) is \$50,000. If the prevailing market assigns a multiple of 15 times EBITDA for apartment complexes, then we can generally say that my property's market value is in the neighborhood of \$750,000. Because I have a \$500,000 mortgage, my equity in this apartment complex is \$250,000.

Now, lets pretend that I convert this enterprise into a corporation and create 1000 shares of stock. So what is each share worth? \$75 or \$25? If the property was owned free and clear without a mortgage, the logical answer is \$75. But if I sell you one share for \$75 knowing full well that there is \$50 debt associated with it, would you feel that you are getting a good deal? I think it's clear, that in this scenario, a reasonable value for one share of WJ Apartments, Inc. stock would be \$25 and not \$75. If you think that \$75 is the correct valuation, I would be happy to sell you all 1000 shares and ride off into the sunset with a big smile on my face and a tidy \$500,000 profit.

Now lets apply this same logic to publicly traded common stocks. Company ABC is trading at \$20 a share and sports a P/E ratio of 10, meaning that its common stock is selling for 10 times its net income of \$2 per share. Company XYZ is also trading at \$20 a share with net income of \$2 per share and an identical P/E ratio of 10. Company ABC is debt free while company XYZ has long term debt equal to \$5 per share. Are they really equal in value?

It's hard to make a convincing argument that both companies are worth the same \$20 per share. But that is how most people look at valuation when using P/E ratios as the sole determinate of value. In the above example, the correct adjustment would be to add the \$5 in debt to the equity market price of XYZ Company making the Enterprise Value actually \$25. Divide \$25 by \$2 in earnings and the effective multiple of XYZ is actually 12.5 making it clearly overvalued when compared to Company ABC which trades at a debt free multiple of 10.

A corollary to this argument suggests that company XYZ is only worth \$15 a share compared to ABC at \$20 a share, even though both report net income of \$2 per share.