

Capital Structures, P/E Ratios and Cash Flow

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Financial analysis is a complicated endeavor. Focusing on a wide range of fundamental variables will likely yield better long-term investment decisions than a more narrow focus on your favorite metric, which brings us to the fact that all P/E ratios are not the same.

For regular readers of this column you will recall that we have focused heavily on cash flow as a valuation metric in both equity and fixed income securities. One of the reasons we talk about cash flow is that it is much harder to manipulate cash flow than it is to manipulate earnings. It's interesting that many investors are well versed in the Price/Earnings ratio as a relative value measure, but most pay scant attention to cash flow.

Because the capital structure decisions implemented by company management drive earnings and thus P/E ratios, I thought it might be interesting to look at the effects of capital structure on hypothetical P/E ratios (share price divided by earnings per share) and cash flow multiples (share price divided by cash flow per share). If you have had your first cup of coffee and you're firing on all cylinders when you read this, you should be quick to point out that, all things being equal (which most of the time they are not, but let's assume they are), capital structure has no effect on cash flow multiples if the stock price remains the same. Exactly! That's why we do not focus strictly on P/E's in equity research, nor strictly on cash flow in fixed income research because all fundamental analysis is interrelated.

Management can influence earnings through capital structure decisions, among others, and thus influence the P/E ratio. This is probably done with a primary emphasis on return on equity numbers and optimal leverage, and with only secondary thoughts on leverage's influence on P/E's.

Why don't we focus strictly on P/Es for stocks and interest coverage for bonds in our research? First of all you must be aware that as a company issues more debt (bonds), its leverage increases. As leverage increases so do P/E ratios and as leverage increases so does risk. With this added risk, our theory is that market forces tend to adjust stock prices downward to "pull" P/Es in line with this higher risk. My task in this article is to look at how, as leverage increases, P/Es rise and cash flow multiples remain constant if the stock price is unchanged. We do know that in a truly efficient market this logic is probably flawed, but until our market is truly efficient, we'll explore every possibility. This is the exact reason we don't focus only on P/E's (equities) or interest coverage ratios (fixed income) in our research.

Take the following two companies (Dollars are in millions): The only difference is that company XYZ has 50% or \$100 million of its \$200 million capital structure in debt. Interest expense goes from zero to \$7 million, net income falls from \$17.50 million to \$12.60 million and the P/E ratio (figured as market capitalization / net income) goes up from 17.14x to 23.81x, holding the market capitalization (or stock price) constant. Management likes debt, up to a point, because

	ABC	XYZ
Total Capital	200.00	200.00
Operating Margin	0.20	0.20
Debt %	-	0.50
Interest Rate	0.07	0.07
Tax Rate	0.30	0.30
Market Capitalization	300.00	300.00

return on equity goes up from 9% to 13%. The multiple on cash flow (in this case Earnings Before Interest, Taxes, Depreciation & Amortization or EBITDA) defined as Market Capitalization / EBITDA remains the same at 10x, showing that capital structure choices have significant effects on P/E's and none on cash flow multiples, again, all things equal.

We conduct our research as if we were going to purchase the entire company and then figure out what a fractional interest (or a share) would be worth. If you owned all of XYZ, both the debt and the equity, what would you get? You would certainly receive the net income of \$12.60 million. But if you also owned all of the debt you would also receive \$7 million in interest income, for a total of \$19.60 million in benefits received. However, if you owned all of ABC, the no-debt company, you would receive the net income of \$17.50 million, or \$2.1 million LESS than the benefits from Company XYZ. Why is this? It's the classic interest expense/tax arbitrage. In effect Uncle Sam is subsidizing your capital structure because interest expense is tax deductible. LBO's were and continue to be popular because through this interest subsidy, wealth can effectively be redistributed from the government to individuals. To the extent this redistribution is taxable to the recipient, taxes are still owed, but they are shifted from companies to debt holders who may be in a position to more effectively manage their own tax consequences. The after-tax cost of debt then becomes a potentially cheap source of capital versus a higher implied cost of equity. Further, if the indebted company (Company XYZ) was privately owned by you and you lent it the money, you could take out \$2.1 million more than in an all equity-financed business. Of course the income would be taxable to you, presumably, but if you were in a lower marginal bracket than the company, you win. Even if you weren't, your taxes may be more easily managed than your company's. At least you would have the opportunity. Besides, debt is cheaper financing than equity as a rule.

Investors who focus only on P/E might be inclined to buy Company ABC. Conversely, investors who focus only on return on equity would be inclined to focus on Company XYZ. Further, focusing only on cash flow, investors might be indifferent between each company. If I told you that Company XYZ was growing twice as fast as Company ABC, you might be willing to buy this growth (invest in Company XYZ) at a P/E less than twice that of Company ABC.