

May you live in interesting times.....

The stock of an upstart but very successful EV company is currently trading at 144 times the average of 2020, 2021, and 2022 forecast consensus earnings. That's an earnings yield of 0.7%. In contrast, an older telecommunications company that has focused in recent years on its "network" is trading at 12 times the average of forward earnings. Its earnings yield on forward consensus earnings is 8.3%. Few if any investors are doing the math of cashflows and discount rates when considering the former company, but it is still permissible and interesting to think about such things. Maybe theories of value matter, maybe they don't. We shall see. But for now, let's run through the math.

As you might recall from your Finance 101 class, a P/E ratio is a form of a Discounted Cash Flow (DCF) ratio. When you flip the P/E over to become an earnings yield, you are also looking at the discount rate used to bring the future earnings—assuming they stay flat—back to the present time. This simple heuristic makes two big assumptions. The first is that those future earnings actually translate into cashflows. That's a pretty big assumption, for at least one of the companies, but the issue of cashflow conversion is a topic for another day. The second assumption is that the math is out into perpetuity. That keeps the exercise simple but unrealistic.

Setting those challenges aside, let's pause for a moment to compare the two discount rates: less than 1% for the one and 8.3% for the other. Whether you use a discount rate as a measure of risk or an expected rate of return (mathematically they are essentially the same, especially in a low "riskfree" rate environment...), the difference is astounding. The former is priced such that future profits aren't really discounted at all. There is supposedly little to no risk to the earnings stream, and little to no inflation to diminish the value of those future earnings. It is priced to "perfection," as they say, so much so, that investors, in theory, are OK with an expected future return of less than 1% per year from a discounted earnings perspective. The latter is priced in a more "normal" fashion: the future earnings are subject to meaningful discounting to reflect the usual combination of business risk and inflation. To accept those risks, investors are looking for a high-single digit return from it or alternatives.

It gets more interesting. The assumption of no growth in the future keeps the math very simple, but that's not how the US stock market works. Most businesses are set up to grow, and once you tweak the formula to include a growth factor, the gap in expectations becomes vast. For the EV company, a discount of 10% demands a growth rate in perpetuity of 9.24% to support a 144 P/E. For a 15% expected rate of return, a sky-high 14.21% growth rate in perpetuity justifies the P/E of 144. In short, at the current valuation, a growth rate just shy of the discount rate is expected. That is asking a lot.

Meanwhile back on main straight, our phone company faces quite different numbers. Using the same 10% discount rate or expected rate of return, the necessary company growth rate is just 1.55% to get to a P/E of 12. That's less than the nominal rate of inflation over the past few decades. It's a lay up. But the 10% discount rate is a fairly high hurdle for a very stable, very cash generative business. At a 6% required rate of return, roughly in line with the company's dividend payment plus nominal inflation, the expected growth rate in perpetuity drops to a negative 2.85%. Let's just think about that. The new company is most certainly going to grow faster than the old one, by a lot. The old company is, well, old but necessary. The question is what is that difference worth. The new company is pricing in high and perpetual growth; the old one is pricing in essentially minimal growth if not actual material decline into perpetuity.

People purchase stocks with 144 P/Es because they think that the share price continue to rise. It's that simple. And investors purchase stakes in companies with P/Es of 12 for very different reasons based on valuation and dividends. So to some extent, we are comparing apples and oranges, especially in terms of investors. Few of the holders of the EV company are thinking, "hmmm, I should cash in my chips and invest in a cheap cashflow company." Similarly, those investors collecting their coupons from the telecommunications company are unlikely to forego 100% of the income to ride EV roller coaster. Still, the math is the math. If it is true that managing expectations is a major component to success in life and investing, then the contrast here is stunning. Just saying....

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