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Earnings Multiples

A Black Tie Affair

Dear Reader,

Thank you for taking the time to read about our insights through ***Perspectives***. Before you continue reading, I would like to offer a small disclaimer: If you are looking for a broad list of statistics related to investment performance, a slew of research credentials, or a how-to guide of some sort, you will be disappointed. The insights that we present within this paper are not heavily researched, or supported by more than our personal experiences and related observations. Through the process of composing these commentaries, we have learned a great deal about the subject. Our intention is to be successful in adding some measure of value to your own views and hopefully allow you to see the subject a little differently than you did before.

We are always open to feedback and discussion and welcome all questions, comments, or rebuttals. We can be reached by telephone at 905.764.5465 or via email through contact@millstreetco.com.

Noah Murad
CEO

"The true investor scarcely ever is forced to sell his shares, and at all other times he is free to disregard the current price quotation. He need pay attention to it and act upon it only to the extent that it suits his book, and no more."- Benjamin Graham

I have often wondered about the way people have used 'earnings multiples' as a valuation methodology, including their commitment to its accuracy.

I have grown up in investment management on certain concepts regarding valuing a business' worth. "A distribution business is valued at four times earnings" and a "Software company is valued at eight times earnings" are common phrases one hears. And, entering the profession we nod along. Why is one business valued at a higher multiple than the other? "Because one has recurring revenue models and this entitles it to a higher relative multiple." This makes a great deal of sense to most, and the more reasons like this are repeated, the more widely accepted they become.

I have often wondered about the way people have used 'earnings multiples' as a valuation methodology, including their commitment to its accuracy. I have discussed this openly with others and soon found that most people were interested in understanding the concept a bit better as well. The questions we all have break down into three basic inquiries:

1. Why are businesses valued at multiples of their earnings and what relevance is it to whether or not you, in reality, paid a good price for the company, or conversely, whether you sold at a good price?
2. Why are some businesses valued at three times earnings and some at 10 times?
3. Why are businesses valued on multiples of EBITDA in some cases and multiples of net income in others?

I will try to examine some of these questions to the best of my ability, but hope to make one greater point: that concepts such as earnings multiples are often used to justify particular investment ideas and actions. When used incorrectly, as they are frequently, they justify poor ideas. A simple metric like this can give the illusion of a relevant, or sophisticated thought process where there really is none.[1]

Finally, the overall premise being discussed here is best summarized by Benjamin Graham's foundational quote used as an introduction to this paper. Investors use

1 In Security Analysis, Graham and Dodd explain in detail how public companies can manipulate earnings figures and how this can lead to poor analysis.

metrics such as multiples in order to explain to others what they have done, and seek reassurance for the risks taken by comparing their investments to others. This thought process de-emphasizes what we are trying to achieve for ourselves personally.

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For the sake of this Perspectives essay, I will be referring only to common stock purchases, both in private and public markets, where one's position can be passive (where shares are purchased and there is no day-to-day management of the business whatsoever) and active (where shares are purchased and the investor is taking actions to affect the value, or becomes the new operating manager of the entire business).[2]

"Valuations" and Valuations

Before attempting to address the questions stated previously, I would like to touch on how fast and loosely the term "valuation" is being used in investing. Professional valuations are completed by qualified individuals who, though it can be broken up into sub categories depending on the company, value the business using three main methods: 1) valuing the book or liquidation value of assets; 2) using the discounted cash flow method; and 3) comparing the transaction price, market-to-market, to other similar transactions that have taken place. This last method includes the earnings multiple discussed here.

It seems that investors who are buying and selling shares in a marketplace engage in some form of the methods detailed above. However, they are a justification of a type of personal investment methodology, not a formal valuation. For example, investors will decipher the goodwill on a company balance sheet for themselves and may adjust this dollar figure relative to their own conclusions. By this point, the resultant value of what an investor will pay for the business may deviate so far from the valuation that it could scarcely be called a valuation anymore.

What follows below, then, is not a formal valuation discussion and is not in any way meant to question this process or professional field of study. What is being discussed is an investment methodology and mentality that is more prevalent to the average investor purchasing common stock in both public and private businesses.

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2 I believe in Graham's view, that public stock is no different than private, in that when you purchase it you are buying a piece of a small business. Therefore, during this paper, investing in the two is used interchangeably.

A General Solution: Pay a Fair Price

Before making an attempt at the questions posed earlier, I want to outline an approach that seems to have the best long-term outcome for investors: to pay a price for the business which both the seller and the buyer find fair.

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This behaviour is contrary to what most investors do by exclusively analyzing relative earnings multiples. This is because investors are seeking the highest returns and therefore the 'best deal', and a better investment in this context means paying a lower relative multiple to competitors or the industry.

There are several challenges with this approach that can be summarized by the following statement: common shares that are sold at cheaper prices, are usually sold at this price for a reason. Often enough this reason is not because the buyer is aware of some information that the seller is not. A more common way of putting this is that, often, most information (especially if it is easily obtainable) is already factored into the price of the business being sold. This is not to say that it is impossible to make an investment profit in the short term by buying at cheap prices, but that the chances of this being repeated over and again for an indefinite period where the buyer has proprietary information is low.

From the buyer's perspective, having a mentality which seeks only to negotiate for the lowest price *requires* that they ignore information which may psychologically raise the value of the business to themselves. It is when this information is ignored that buyers miss opportunities to purchase stock in superior businesses.

As an example, Starbucks' annual average P/E ratio over the past 17 years has been 24, and over the last five years the average P/E ratio was in the high 20's. A buyer seeking to pay relatively low multiples would screen out this stock because, by this measure, the price is not a discounted one. By eliminating this stock as an investment option, they have ignored the possibility that the business is selling at a higher relative price because it is simply a superior one.

The general solution to avoiding the limitations of valuation through earnings multiples is to have a wider view about determining value – a view that factors in all of the resources at the company's disposal, including those that cannot be accounted for on a financial statement (i.e. qualitative measures). For example, Starbucks processes more payments on mobile devices than any other food

Paying a fair price involves a mental exercise where one actually acknowledges the advantages that a company may have, and calculates that these advantages are probably worth something.

retailer and has a loyalty program where customers pre-pay for food items.[3] The quality of its store locations, customer service and brand loyalty are apparent to anyone walking the streets today. Comparing Starbucks to any other specialty food and beverage retailer makes these advantages obvious to anyone living in Western society. In other words, a lot of qualitative measures can be observed through common sense and outside the limited realm of financial statements.[4]

Paying a fair price involves a mental exercise where one actually acknowledges the advantages that a company may have, and calculates that these advantages are probably worth something. In some cases these advantages can be determining factors in valuing the business over and above its historical performance.

Paying a fair price has other advantages: if you buy great businesses that are conservatively financed, you will do well over time because your portfolio will contain only great businesses and no poor ones. Secondly, if you are purchasing private businesses in negotiated sales, you will probably earn a reputation for treating the seller fairly, which may lead to more opportunities in the future.

On to the Questions

I will now address the questions previously introduced and go into slightly more detail about earnings multiples and their differences. In doing so, I hope to provide some background related to how these methods are misinterpreted. Those who are not interested in such technical discussions on the subject can skip ahead to the section titled "As it Suites Your Book" and continue reading from there.

Question 1: Why are businesses valued at multiples of their earnings and what relevance is it to whether or not you, in reality, paid a good price for the company, or conversely, whether you sold at a good price?

The first part of the question, regarding why we use this method, is abstract to the point where I believe that if we asked ten people the question, each answer would be slightly different. Filtered down, however, I believe that you will usually get an answer that is similar to one of the two following ideas. First, that the earnings multiple is a generalized valuation method that can be applied (in theory) equally

3 Prepaying for items like coffee still baffles me, yet Starbucks still processes billions of dollars a year through this program.

4 Many investors have written books that have touched on this concept: Peter Lynch, Philip Fisher (who only looked at financial statements as a final step in his research) and Joel Greenblatt.

If you only seek businesses that are selling at low multiples/values, then you will almost never purchase shares of superior businesses, since superior businesses should by their nature cost more than inferior ones.

to any industry. It does so by providing one simple figure as the result of one simple calculation. This allows the comparison between different companies to determine the "true" market price. Simply put, people are inclined to believe that there is some kind of magical formula to value businesses that can be explained with a single figure.

Secondly, that a business' worth is relative to the earnings it produces, and the multiple represents how many years' worth of these cash flows the buyer and seller are willing to pay and receive. For example, a buyer purchasing shares for a five time multiple of annual earnings will (again, in theory) earn back his purchase price in five years.

To answer the second part of the question related to whether the multiple is an indication of a good price is also an abstract concept. Sometimes, the business you purchased was for sale at a low multiple because it was actually worth what you paid, or less. In this case, you have likely purchased a poor business. In addition, the individuals selling you the business, or the public stock, were probably at least somewhat aware of why it would yield a lower price and you were not.

As discussed above, if you only seek businesses that are selling at low multiples, then you will almost never purchase shares of superior businesses, since superior businesses should by their nature cost more than inferior ones.

To use what is now a famous example of this concept, Warren Buffett grew his initial investment partnerships by paying only for businesses which were valued cheaply. With Charlie Munger's influence, they purchased See's Candies for a price, which by Buffett's previous standards would have been tremendously overvalued. Today, the $25 million he paid for it is only a fraction of its annual earnings. Buffett often brings up See's Candies as an example of how businesses with certain characteristics should be purchased at relatively higher prices. There are many other examples of investors purchasing businesses at "high" multiples and having success, such as Bill Miller purchasing Apple and Amazon at relatively high multiples five to eight years ago. There are also many examples of the opposite being true. For example, investors like Bruce Berkowitz who has held onto a large position in Sears stock because, among other reasons, it has been undervalued according to these metrics.[5]

5 By the way, Berkowitz could still be 'right' in the long term. He often discusses how Sears is really a real estate firm and the assets have yet to be properly recognized. This would be another example of why an earnings multiple would be less relevant to value Sears in this case.

Whether a lower multiple is an indication of a better deal for a buyer, or that the buyer was 'right' or 'wrong', is only settled over the course of the lifetime of the business. In the case of the buyer, he will not know until he has sold the shares. If he does not sell, then the multiple becomes less relevant. For example, if the business is purchased for a multiple of five, and earnings stay stable for 50 years, the owner could have paid 20-30 times the earnings and still generated a substantial profit, all things being equal. If, however, instead of being held for 50 years, the investment is sold 10 years later, the multiple of earnings would be far more relevant to the investor's profit, or loss.[6]

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In the case of the seller, it is not as simple as "buy low, sell high" when considering whether you sold at a good price. A simple example of this is selling a stock right before it doubles in price. A profit on the sale of stock is not a bad thing, but buying at a low earnings multiple and selling at a higher one does not determine whether the price you received was a good one. Selling early can also mean that the investor lacked knowledge of the true intrinsic value of the business at the time he sold.[7]

Note that what we are discussing here relates to dealing with uncertainty. We obviously do not know how the shares of a business will be priced in the future. What is known, however, is what the buyer would like to pay at the present time, and what the seller would like to receive in consideration, again, at that point in time. Yes, there are vague outlines of what certain businesses can yield in a sale based on their industry. However, these can and do change.

This makes the general question of whether a certain multiple is an accurate absolute valuation of a business an irrelevant one. In fact, at its core, over the long term, it's entirely superficial to those who are long term investors, and meaningless to those not at all engaged in the prospect of selling their shares.[8]

6 The key variable here is the time horizon. This is true for all types of investing. The longer one holds an investment, the less relevant the upfront purchase price is of the business, provided the business stays viable and/or grows overtime.

7 I recently heard a story of a real estate expert who flipped a downtown parking lot in a few months to make a $300,000 profit. That same lot was sold years later for $100 million.

8 This does not mean to say that all valuation exercises are pointless, but rather that the concept of a formula equating to the absolute value of a business during a period of time is not mathematically definable.

Businesses that require less capital to both maintain assets and to grow are valued at higher multiples because they (in theory) can grow their earnings at a quicker rate.

Question 2: Why are some businesses valued at three times its earnings and some at 25 times, or some larger amount?

This question requires a slightly more technical answer, though it helps to provide some background knowledge for the overall point of this paper. It is true that certain businesses, which have either (1) recurring revenues like software companies, (2) intangible assets like brand equity, or (3) intellectual property like software, or technology, are generally valued at multiples of earnings that are far higher than "old economy" businesses like distribution and manufacturing.

These businesses are valued higher, because conventional accounting cannot capture the true value of the assets (tangible, or intangible) of these companies rather than because they are "actually" worth more. The denominators for the intangible assets tend to be smaller, because they are accounted for at cost. So, the ratios that result from calculating the market price of these companies tend to be higher, since successful businesses operating in these categories will earn more on a lower cost base.[9]

Since they require significantly less capital to grow, typically, than a manufacturer for example, there is an assumption made that growth can occur overnight.[10] An example of these accounting limitations can be seen in companies like Facebook. Although the most recent balance sheet values the goodwill, or intangible assets at $20 billion, the assets produce earnings of tens of billions of dollars and are actually *increasing* their rates of return. In the case of a manufacturer, where capital would be used to purchase machinery, the earnings would decrease along with the effectiveness of the asset (i.e. depreciation, which would require annual capital investment to maintain the asset).

In general, then, businesses that require less capital to both maintain assets and to grow are valued at higher multiples because they (in theory) can grow their earnings at a quicker rate. The multiples usually factor in the future growth rate.

More can be said about this topic, but the technicality of this response is a digression too far from the original point.[11]

9 Of course, this is the sign of a successful business in any industry, but conventional accounting methods still have limitations in capturing the value of these items successfully on a regular basis.

10 Another important point about businesses with recurring revenue is that this is an indication that the business does not spend as much time and capital acquiring new business.

11 A suggestion for those interested would be to read Buffett's quick piece on goodwill amortization on the Berkshire website.

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Question 3: Why are businesses valued on multiples of EBITDA in some cases and multiples of net income in others?

Quite simply, EBITDA is applicable only in two scenarios that I can conceive of. First, where a bank or lender can use this measure to calculate how much of the earnings of the business can be used to pay their priority interest payment. Second, where a buyer who is about to assume control of the business is buying a company debt-free. In this case EBITDA provides a measure for earnings that are available to the buyer to use for debt servicing to the bank if they are using debt to aquire a business. The caveat to both of these applications is that the business is not in manufacturing, or some other business that relies on capital expenditure. In this case, there should be a provision for this in the cash flow.

EBITDA is likely the most commonly misused and misinterpreted figure, particularly in private business valuations. It is interesting that EBITDA, to the owner, or operator of a business, is not relevant as a measure of day-to-day performance. An owner who has certain debt payments, or capital expenditure requirements, really does pay these cash expenses. Presenting EBITDA to a potential buyer of stock allows the seller to repackage their business in a way that essentially ignores certain costs and business realities to make the business appear more valuable. I am highly skeptical of whether or not EBITDA enters into the day-to-day operations discussions of most managers unless they are discussing a sale.

Within public companies, EBITDA is, more often than not, even less applicable to a minority shareholder. Public companies often report adjusted EBITDA numbers. These are not helpful in determining value to a passive shareholder who only benefits from earnings that actually stay in the business, or are returned to the shareholders through share repurchases, or dividends.[12]

Some Additional Ways in Which Valuation Metrics Can Hide Common Sense

Over the past several years I have attended a lot of black tie weddings. At a recent affair, I realized that all the men tend to wear the same thing more or less: black suit, white shirt, black tie, black shoes. There are some exceptions, but for the most part every male looks the same. On one occasion, a certain guest drank so much

12 One should read Security Analysis, specifically chapter 31, to get a better understanding of how public companies can manipulate earnings numbers using non-GAAP items like EBITDA.

that by the end of the night he was passed out in a cab wearing only his suit pants and undershirt.

Most of the language around valuation has a similar effect on investment ideas as the black suit and tie had on that individual that night. Common terms such as "Multiple of EBITDA" or "P/E Ratios" camouflage the true value (or lack thereof) underneath the surface. Investing is interesting, because although the action of two different investors can look the same on the outside (i.e. purchasing shares), the logic and decision making behind the action can be very different.

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Here's an example: At a popular stock market analytics firm, an analyst is discussing Valeant Pharmaceuticals[13] ("VRX") in 2015: "At about $218 per share, the company is priced at a price-to-earnings ratio (P/E) of 16.5, which is a discounted multiple to pay for a business that is expected to grow earnings between 20%-25%." In VRX's case, this information was not necessary in order to properly understand, even vaguely, what the value of the business was. At the time, there was an investigation being conducted by the US government into pricing issues related to VRX's pharmaceutical products. During the following year, VRX experienced one of the more famous stock market collapses in recent history.

In this example we had an analyst who was justifying the purchase of a stock based on: (1) relatively low P/E ratios, and (2) expected earnings growth. Both of these metrics ignored more relevant information about the business that would take precedent over the earnings multiple.

In private markets these errors are frequently being made as well. For example, one reasonably well known private equity group purchased a business with dated, branded merchandise (think t-shirts and posters that say "Cleveland Cavaliers 2016 NBA Champions") on a multiple of earnings. Of course the earnings depended on the ability of the company to sell the inventory at a markup of its cost.

A more appropriate valuation method should have included an allowance for inventory values to be written down. The reason is that by the following year any inventory that was not sold would lose value immediately, since 2016 NBA Championship merchandise would not be relevant anymore and would then have to be quickly replaced with merchandise for the 2017 NBA championship team.

13 If you do not know what company this is I suggest you Google it before continuing.

In this example, a "good" valuation for the business based on multiples actually grossly overvalued the business.

In other words, in the year 2020, NBA Championship merchandise from 2016 would not have the same retail or wholesale value as it would in 2016. The fund purchased the company for a multiple of three (better than the industry average) and eventually wrote off large inventory positions because it discovered that what it had bought was overvalued on the company's books. More simply, inventory that previously had a retail price of $100, could only be sold for $10, which would cause a large drop in profits.[14]

In this example, a "good" valuation for the business based on multiples actually grossly overvalued the business. Similar to the Valeant example, we find investors ignoring relevant information about value and justifying their position behind the rationale of a "Below market multiple of EBITDA." This type of language is irrelevant and misleading. One can, in fact, entirely ignore this type of jargon when making investment decisions. It is black tie attire covering up a drunken mess.

As it Suites Your Book

As mentioned earlier, the steadfastness with which people rely on Earnings Multiples, or more specifically Multiples of EBITDA to value companies becomes very surprising when you first begin investing. As one meets other business owners, brokers, etc., you realize that most sellers (whether of private, or public businesses) have some concept of value in their own minds. Meaning, they have an idea of what they would like to receive for selling their stock. A generalized non-GAAP accounting metric like EBITDA provides a seller with the ability to justify those values, so long as this is not too far of a stretch.

For example, though you are firmly told by a seller that their distribution business is worth a six time multiple of EBITDA, and a buyer tells you the same business is a four time multiple of EBITDA, this discussion is usually taking place because the seller wants a certain dollar value, and not because the two sides are arguing the merits of their valuation methods.[15]

14 This happens often in retail, particularly in clothing stores.

15 It should be noted that there is a rough guideline that the market provides, and I do not mean to discount this. I am mainly speaking here about small discrepancies in multiples like difference given in this example. Obviously, if the market believes distribution companies are worth four to six times EBITDA and a seller wants 20 times, they will likely never sell.

What matters, then, is not value in an 'absolute' sense the way the subject is currently thought of, but rather, what the buyer and seller, taking into account all factors, will accept at that moment in time.

I would like to go back to an earlier sentence written above:

This makes the general question of whether a certain multiple is an accurate valuation of a business, an irrelevant one. In fact at its core, over the long term, it's entirely superficial.

A common message threaded throughout this paper has been the variability of valuations because of the way in which they are used. If a company can be sold for a higher multiple, it is. If it can be sold for a metric like 'number of clicks per day', it is. Valuation methods, at their core, are sales tools. More notably, they are totally abstract, with blips of crystallization periods that verify certain values at various times.

What matters, then, is not value in an 'absolute' sense the way the subject is currently thought of, but rather what the buyer and seller, taking into account all factors, will accept at that moment in time. As an investor, to be sure, the most important factor is only what you are hoping to achieve as an individual throughout your lifetime. Only the activities that lead you to achieving these investment goals are relevant.

Put another way, one only needs a common, uniform metric that a mass of people can understand if the intention is to use the concept to explain a decision that has been made, (whether or not this is bragging, or being used as justification). If you view investing as a means to your own ends, discussions about metrics such as earnings multiples should be replaced with discussions about the quality and performance of the businesses you own and how your portfolio will help you achieve your long-term goals.