

On the Nature of Entry Multiples

Are Entrepreneurs and Investors Too Focused on Entry Multiples?

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In 1972, Warren Buffet, the sagacious investor from Omaha, Nebraska, was interested in acquiring [See's Candies](#), an American manufacturer and distributor of boxed chocolates. As Buffet explained in his 2007 annual letter to Berkshire Hathaway shareholders, the negotiation over price was relatively contentious.

"The seller was asking \$30 million, and I was adamant about not going above \$25 million."⁵

At the time of the potential acquisition, See's Candies' West Coast operations were generating pre-tax earnings of approximately \$4 million on \$30 million of sales. Despite Buffet's confidence in See's business model, he was unwilling to pay more than 6.25x the earnings to buy the company. Buffet was ready to walk away if See's "had asked for \$100,000 more."⁶

Fortunately, the seller acquiesced, and Berkshire Hathaway (Blue Chip Stamps, a predecessor entity) acquired See's Candies for \$25 million. The deal was nothing short of a triumph for Buffet and Berkshire. The most recently available financial data (from 2007) shows See's Candies as having generated cumulative pre-tax profits of \$1.35 billion.⁷ Buffet called See's "the prototype of a dream business." Charlie Munger, Buffet's longtime business partner, said that See's "was the first high-quality business [Berkshire] ever bought."⁸

See's Candies taught Buffet, a savvy investor, an important lesson about purchase prices and, by extension, entry multiples. While he was fixated on low prices in the early days of his investing, Buffet now lives by the mantra, "It is far better to buy a wonderful company at a fair price than a fair company at a wonderful price."⁹ We interpret Buffet's description of a company being wonderful as meaning one that can consistently grow. Growth is what drives long-term wealth creation, not low entry multiples. Consider the study conducted jointly by the Technical University of Munich and Capital Dynamics, which concludes that the majority of value creation in private equity derives from operational improvements. The study analyzed 701 exits between 1990 and 2013. Setting aside leverage, operational improvements (defined as EBITDA* growth and free cash flow) accounted for 74% of value creation. The remaining 26% was attributable to the multiple effect, a term for multiple expansion.¹⁰ Even in the world of private equity, where short hold periods limit the opportunity to increase EBITDA and generate free cash flow, growth in operations proves to be a far more important driver of returns than entry and exit multiples.

Why then, do entrepreneurs and investors place so much emphasis on entry multiples and buying well? The first, most obvious answer is that the purchase price has an impact on the financial performance of a transaction. We would posit that the second, less obvious answer is

* Earnings before interest, taxes, depreciation, and amortization

that everyone else does.

Let us be clear: We are not advocating overpaying for companies. Paying less is always the preferred route. However, we make the argument, mostly quantitatively, that investors are often too focused on entry multiples and do not understand that an extra turn* or two of purchase price will not ruin a transaction's economics, especially if the investor has a long-term orientation and the target company has at least modest growth prospects.

A Brief Explanation of Multiples

The simplicity of financial multiples and their ability to help an investor distill a great deal of information into one number make them the most widely used metric for valuation in both public and private markets. However, it is important to note that multiples, while helpful, represent shorthand math. Entry EBITDA multiples are simply a proxy to provide context around a purchase price generated by building a detailed discounted cash flow (DCF) analysis. When we reference entry multiples, we are concurrently referencing entry valuations.

In our analysis, entry multiples will be calculated by dividing the potential purchase price at acquisition by the company's projected EBITDA for the following year. The simple formula is as follows:

$$\text{Entry Multiple} = \text{Purchase Price}_T / \text{EBITDA}_{T+1}$$

Average entry multiples in the private equity buyout market have steadily increased to 12.8x as of the end of 2019.¹¹ However, this note is not geared toward multi-billion-dollar buyout funds but rather entrepreneurs and investors in the lower middle market. As a result, our analysis will display scenarios and sensitivities that are centered on the mid-single-digit EBITDA multiple range, which research has shown to be the range in which small business owners transact. Stanford's 2018 study on search funds found that the median entry multiple for those looking to acquire a business was 6.3x.¹² Many young, first-time entrepreneurs seek to acquire businesses with annual EBITDA of \$1 to \$5 million and target an entry valuation in the 4–6x EBITDA range.

In this note, we will explore the importance, or lack of importance, of entry multiples:

- in short-term holds when the investment is a great success, a great failure, or a middle-of-the-road outcome; and
- in long-term holds when the investment grows rapidly or more tepidly.

Creating Value by Buying Well, Operating Well, and Exiting Well

There are typically three ways to create value along the entrepreneurial ownership journey: buying well, operating well, and selling well. At the beginning of the acquisition journey, it is easy to overweight the importance of buying well. The negotiation over price is often the primary focus at the front end of a deal. However, it is important to remember that buying well is only one component of a successful

* Entrepreneurs and investors often express the purchase price of a business as turns of EBITDA (earnings before interest, taxes, depreciation, and amortization). For example, a business with \$1 million in EBITDA that sells for \$5 million, traded at 5 turns. An additional turn would imply another \$1 million in valuation or \$6 million instead of \$5 million.

economic outcome, and entrepreneurs and investors should not pass on an attractive company over a modest increase in entry valuation. In fact, as we intend to show in our analysis, in many cases, the importance of entry multiples pales in comparison to that of acquiring a growing business and operating it well over an extended hold period.

Figure 1: Three Components that Drive Value in an Entrepreneurial Journey



Our analysis will include the cash flow profile and financial returns of several hypothetical company acquisitions. In an attempt to mirror the private equity model, we will first detail the economic impact of entry multiples on short-term, five-year holds. We will then shift to our preferred approach to the private investment world, which involves viewing an investment opportunity through a long-term lens.

Short-term Holds

We generally encourage entrepreneurs and investors in the lower middle market space to view the world in decades rather than years. However, while we are biased toward longer hold periods, much of the private investment universe is not. For example, traditional private equity (PE) firms, due in large part to the legal life of their respective funds, have a five-year median hold period for sub-\$100 million portfolio transactions.¹³ Given the PE industry's outsized contribution to deal flow in the investment world, it is worth quantitatively analyzing how an additional turn or two of entry multiple impacts deal performance in the context of short-term holds. We elected to sort hypothetical deal performances over a five-year hold into three distinct, baseball-themed categories: the Home Run, the Strikeout, and the Single.

The Home Run

Especially over such a short hold, a Home Run is likely the product of a series of fortunate events, a successful operational and management strategy, and a healthy capital market environment. A Home Run company results in tremendous wealth being generated for the entrepreneur and their investors. However, in a Home Run outcome, does an additional turn or two of entry multiple at acquisition change the return profile of a deal? Financial returns from and the underlying cash flow assumptions of a Home Run dealing with entry multiples of 5x, 6x, and 7x are displayed in **Table 1** below.

Table 1: Relative IRR and MOIC on a Short-term Investment at Various Entry Multiples in a High-Growth Scenario*

Entry EBITDA Multiple	Internal Rate of Return (IRR)	Multiple of Invested Capital (MOIC)
5x	63%	10.0x
6x	56%	8.3x
7x	51%	7.1x

*Assumptions: 50% EBITDA to free cash flow conversion rate, 35% annual growth rate, exit in five years, exit multiple at 10x EBITDA. For the detail on all calculations in this note, please click [here](#).

During acquisition diligence, it would be reckless to underwrite a Home Run result, as it requires outsized growth and at least some level of multiple expansion, as evidenced by the data above. However, like Warren Buffet evaluating See's Candies, it is certainly possible for an entrepreneur to uncover in diligence that a company has a disproportionate chance of generating a Home Run economic outcome. Despite their belief in the fundamentals of a business, however, some investors who identify a potential Home Run business are overly focused on the entry multiple at which they can buy it. They accord so much importance to buying well that they end up walking away from a great opportunity, unwilling to accept another turn or two of multiple.

The above financial returns in the 5x, 6x, and 7x scenarios suggest that this is a mistake. While there is clearly an economic difference between a 10.0x and 7.1x MOIC, both multiples are Home Run outcomes and are paired with very high IRRs. Furthermore, the aspiring entrepreneur who holds firm at a 5x (or 6x) multiple is unlikely to get as lucky as Buffet was in negotiating with a seller who capitulated on price. It is more likely that a seller will hold on to their company or find a (smarter) buyer willing to pay a higher multiple, leaving the aspiring business owner to lose out on an opportunity to generate a 51% IRR and a 7.1x MOIC—an exceptional result—because they set a relatively arbitrary entry-multiple ceiling.

Again, we do not advocate blindly paying another two turns of EBITDA for a company that does not warrant it. However, when given the chance to buy and hold a quality company with underwritable double-digit growth prospects, you should seize the opportunity regardless of the higher entry valuation. You will thank yourself later.

The Strikeout

Opposite the Home Run is the Strikeout. The Strikeout is an entrepreneur's nightmare and can happen for a variety of unfortunate reasons. No matter the cause, the result is generally the same: a loss of capital. While it is certainly a disastrous outcome, should the fear of a Strikeout prevent an entrepreneur from stretching on entry valuation for a company they have confidence in? The returns displayed in **Table 2** below suggest that the answer is an unequivocal "No."

Table 2: Relative IRR and MOIC on a Short-term Investment at Various Entry Multiples in a Negative Growth Scenario*

Entry EBITDA Multiple	Internal Rate of Return (IRR)	Multiple of Invested Capital (MOIC)
5x	-15%	0.5x
6x	-19%	0.5x
7x	-22%	0.4x

*Assumptions: 50% EBITDA to free cash flow conversion rate, -25% annual growth rate, exit in five years, exit multiple at 5x EBITDA

This scenario uses the same entry multiples (5x, 6x, and 7x) as the Home Run scenario but slashes growth and holds the exit multiple constant. Consequently, deal returns plummet to -22% and 0.4x at an entry multiple of 7x. However, the entry valuation is not the driver of the bad returns; the negative growth is. As the table shows, the deal would still be in shambles if the buyer paid 5x or 6x instead of 7x. A slightly better entry multiple is incapable of making up for lack of growth in the underlying business. Entry valuations will rarely turn a Strikeout into a winner.

The Single

For every Home Run and Strikeout, there are several deals that end up somewhere in the middle. In Single transactions, where returns are acceptable but not outstanding, a turn or two of the entry multiple can indeed have a material impact on financial returns.

We posit that private equity investors are highly focused on entry multiples when evaluating the merits of a potential transaction because their portfolio companies generate these middle-of-the-road financial outcomes frequently. Over the last fifteen years, private equity funds have generated a 13.0% IRR for investors, net of fees.¹⁴ Median MOICs for either fully-realized or mostly-realized funds raised between 2000 and 2010 range from 1.99x to 1.44x.¹⁵ While private equity returns are certainly positive, they are by no means Home Runs.

Private equity median returns are likely the product of the market landscape and traditional fund structure. Whether operating in the middle market or a larger buyout space, there is intense competition for deals, leading to higher entry valuations. Companies sold to private equity buyers also have a history of at least one round of institutional ownership. As a result, many traditional growth and efficiency initiatives have been implemented before acquisition. Lastly, and perhaps most importantly, average private equity hold periods are only four to six years, making it extremely difficult in an efficient market to generate Home Run multiples on invested capital.¹⁶

We say all this not to disparage the private equity business model, as the industry clearly provides valuable investment access and financial returns to almost all the most sophisticated institutional investors in the world. Rather, we mean to explain why the private equity industry has legitimate reasons to be laser-focused on entry multiples. As shown in **Table 3** below, in high-multiple, modest-growth, short-hold-period scenarios, entry valuation and multiple expansion become the dominant drivers of economic returns. It is difficult to grow out of an aggressive purchase price in five years.

Table 3: Relative IRR and MOIC on a Short-term Investment at Various Entry Multiples in a Low-Growth Scenario*

Entry EBITDA Multiple	Internal Rate of Return (IRR)	Multiple of Invested Capital (MOIC)
5x	19%	2.2x
6x	14%	1.8x
7x	10%	1.5x

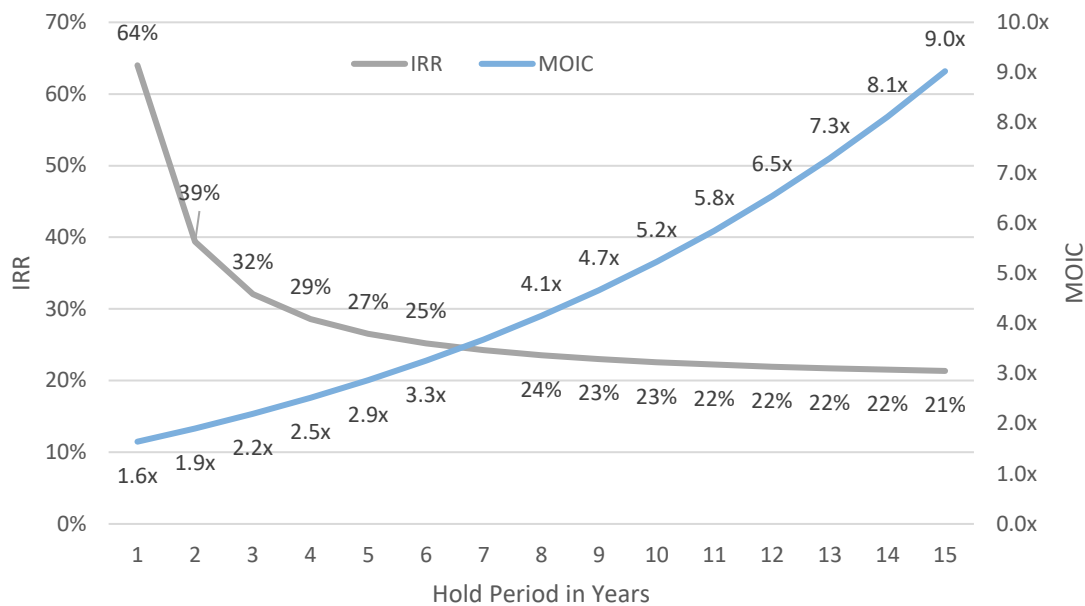
*Assumptions: 50% EBITDA to free cash flow conversion rate, 3% annual growth rate, exit in five years, exit multiple at 7x EBITDA

As the above returns show, shifting between a 5x multiple and a 7x multiple changes the profile of the economics. A 19% IRR and 2.2x MOIC at a 5x entry multiple is a good economic result; however, a 10% IRR and 1.5x MOIC at a 7x entry multiple is not. Obviously, not every deal that comes across an entrepreneur's desk is going to look like a Home Run. During diligence, for any number of reasons, a potential buyer may identify a middle-of-the-road outcome as likely. These companies fall under Buffet's definition of a "fair" company. In these situations, a buyer must be more cognizant of entry multiples, as the math shows that mediocre growth will not make up for another two turns of purchase price.

Long-term Holds

As previously mentioned, we are firm believers in viewing a company acquisition through a long-term lens. The primary goal of entrepreneurs, both big and small, is to generate financial returns that create significant wealth for both themselves and their investors. While they do not always live by their own mantra, private equity investors are correct in proclaiming that “you can’t eat IRR.” In other words, wealth is generated by the dollar profit produced by a transaction—not by a high IRR over a short hold. Even in a healthy business, it takes time to materially increase EBITDA, generate sizeable cumulative free cash flows, and position the company for a successful sale. **Figure 2**, displayed below, illustrates the trade-off between IRR and MOIC in a company generating 10% annual growth with an entry multiple of 5x EBITDA and a constant exit multiple of 7x EBITDA over various holding periods.

Figure 2: IRR vs MOIC over Time



An IRR-centric private equity investor may elect to sell the company at Year 4, achieving a 29% IRR and 2.5x MOIC, but an entrepreneur who has the latitude to take a long-term approach would be willing to sacrifice IRR basis points for additional multiples on invested capital. The non-IRR-centric entrepreneur is focused on MOIC since IRR behaves asymptotically over time, while MOIC continues to amplify. For a more complete examination of why long-term holds are desirable, see [On the Nature of Long-term Holds](#).

Fair Company at Wonderful Price or Wonderful Company at Fair Price?

To further illustrate the power of a long-term-hold approach, we will harken back to one of Warren Buffet’s investment principles: “It is far better to buy a wonderful company at a fair price than a fair company at a wonderful price.” Applying Buffet’s mantra to our entry multiple conversation, we would say, “It is far better to buy a fast-growing company at a higher multiple than a modest-growing company at a lower multiple.” **Table 4** depicts the inputs that drive the results of the fair company and the wonderful company shown in **Figures 3** and **4** below. The math supports Buffet’s claim, especially when analyzing returns over a decade or more.

Table 4: Inputs for Fair and Wonderful Company Calculations in Figures 3 and 4

	Fair	Wonderful
Entry Multiple	5.0x	7.0x
Growth Rate	4.0%	10.0%
Exit Multiple	10.0x	10.0x

Figure 3: Fair Company vs. Wonderful Company (Years 1 to 10)

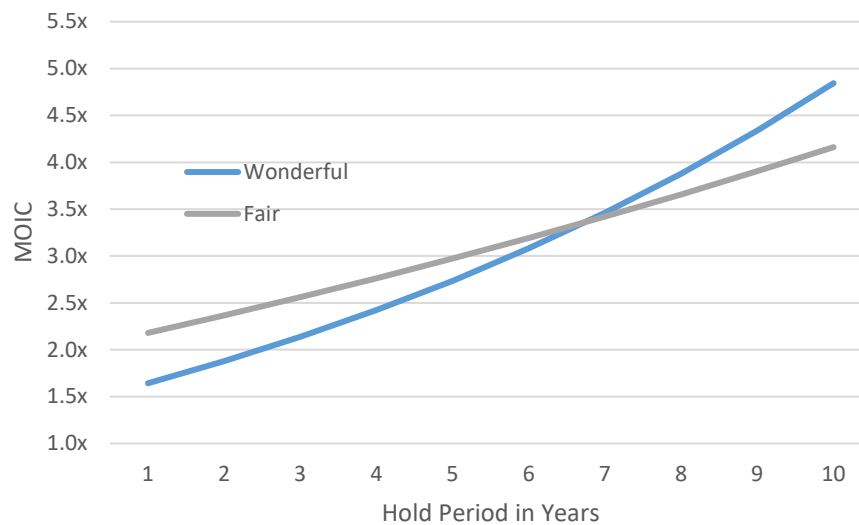
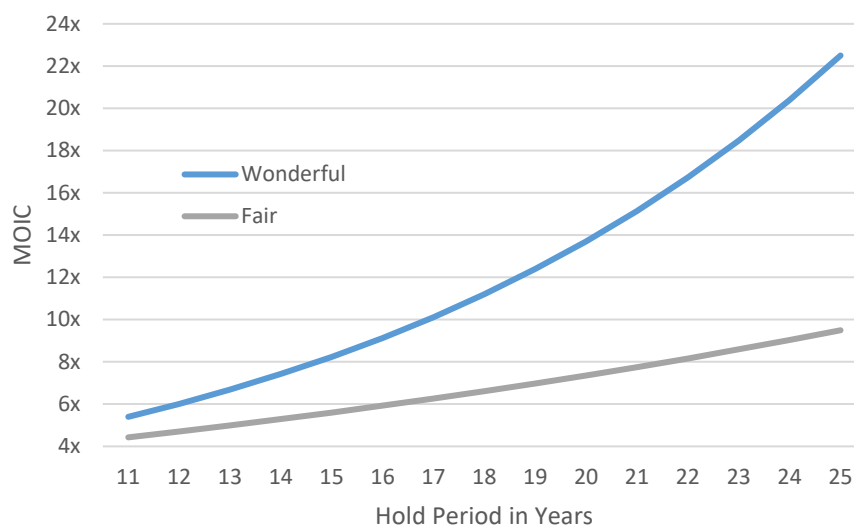


Figure 4: Fair Company vs. Wonderful Company (Years 11 to 25)



Looking at **Figures 3 and 4**, we see once again the power of consistent, compounding growth and a long-term orientation. The fair company has an advantage in a short-hold-period situation due to the (partially artificial) multiple expansion at sale, but as growth continues to compound at the wonderful company, its value begins to dwarf that of the fair company. One can quibble over the growth and multiple assumptions of the fair and wonderful companies; however, no matter the assumptions used, the math is clear: Strong growth is a far more powerful driver of financial returns than entry valuation if an investor is willing to view the investment in decades rather than years.

While the fair company begins to trail the wonderful company by a wide margin in years 11 to 25, it is worth noting that an investor in either company is rewarded with nominal dollars as the hold period is extended. While the MOIC continues to increase, consistent growth will eventually cause the IRR to stabilize, as shown in **Figure 2**. As the hold period extends, the net present value of the company's terminal value becomes a decreasingly important driver of returns. The investor's IRR begins to converge on the company's long-run cash flow yield.

Conclusion

[David Dodson](#), a Lecturer in Management at Stanford Graduate School of Business and an active investor in the lower middle market, once separated into two columns on a whiteboard the companies he was buoyant about having invested in and the companies he was woebegone about having invested in. He then re-calculated financial returns for all the deals by adjusting the entry valuation for the stellar and undesirable companies up and down by 20%, respectively. The updated returns based on the hypothetical entry valuation did not warrant moving one single transaction to the opposite column. In other words, despite the hypothetical change in entry valuations, he was still happy with the returns from the good deals and still disappointed in the bad deals. The quality of the company and its ability to generate growth over the hold period determined the eventual quality of Dodson's deals—not the price at which the company was acquired.

As entrepreneurs evaluate acquisition opportunities, they should keep Dodson's experience regarding entry valuations in mind. In the lower middle market, many companies can be purchased at low entry multiples. As a result, it is tempting for first-time entrepreneurs to become bargain hunters who only evaluate companies that are for sale at 4x or 5x EBITDA. However, while low entry multiples can amplify short-term returns in Single scenarios, low entry multiples will not provide a salve in a Strikeout and will only marginally improve returns in a Home Run scenario.

In long-term scenarios, the growth of wonderful companies is what drives returns, not the entry multiple. Entrepreneurs with a long-term view of the world are far better off paying a *moderate* premium to own a wonderful business than buying a fair business at a low entry multiple. If Warren Buffett had purchased See's Candies for \$50 million instead of \$25 million, he still would have enjoyed pre-tax profits of \$1.35 billion (less the incremental \$25 million paid). For a wonderful company such as See's, paying up is well worth a growing profit stream over decades.

We are not encouraging entrepreneurs to be cavalier when contemplating purchase multiples. All else being constant, lower valuations and entry multiples lead to higher returns. However, we hope that entrepreneurs will think critically about the importance—or lack thereof—of entry multiples and we caution them against being overly influenced by entry valuation when evaluating companies with strong growth prospects that will be owned for decades. If entrepreneurs are willing to pay a slight premium for a wonderful company, they just might wind up in as sweet a situation as Buffet with See's Candies.

This case has been developed for pedagogical purposes. The case is not intended to furnish primary data, serve as an endorsement of the organization in question, or illustrate either effective or ineffective management techniques or strategies.

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Endnotes

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