YALE CASE JANUARY 12, 2026

Yale SCHOOL OF MANAGEMENT

A Mathematical Analysis of Value-Creation Attribution in Search Fund Projects

ETA firms have posted strong economic returns; when we deconstruct the value drivers, we identify consistent patterns behind these outcomes

Daniel Lazier[1]
Jacob Thomas[2]
A. J. Wasserstein[3]

Search funds are an increasingly popular post-MBA career choice. They attract motivated aspiring entrepreneurs who seek wealth, independence, and fulfillment. We are unabashed fans and believe the path offers a wonderful opportunity. Additionally, a flood of capital is rushing into the asset class, hunting for attractive returns. Entrepreneurship through acquisition (ETA) means different things to different people, but part of its appeal, for both entrepreneurs and investors, is the potential for value creation—such as buying a company for $15 million and selling it for $62 million five years later. ETA is peppered with stories of prodigious wealth creation, but the tale is rarely broken down into its core elements.

We seek to identify the key factors underlying changes in enterprise value, including the main causes of the shift and the elements involved in the transformation. We can broadly decompose these changes into three primary financial vectors: revenue growth, margin fluctuations, and trading multiple expansion or contraction. Note that both revenue growth and margin fluctuations influence changes in earnings before interest, taxes, depreciation, and amortization (EBITDA). These three trends help reveal the factors behind variations in enterprise value and the relative potency of each. We exclude leverage from our analysis intentionally because it varies throughout the holding period due to refinancings, and it was difficult to obtain from our data providers.

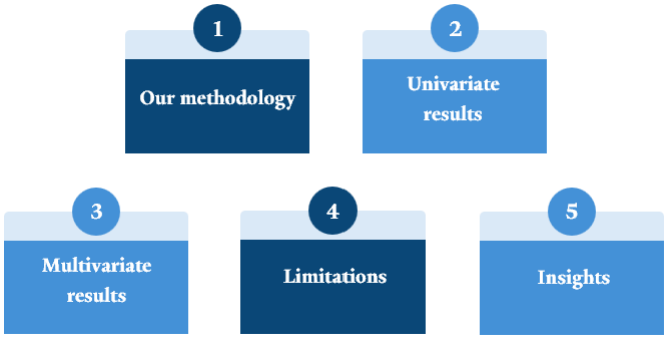
We are writing this note because we are curious about how value is actually created in ETA ventures. It is insufficient to look at the headline story; we need to delve deeper into the component elements and investigate which ones matter most. We also want entrepreneurs and investors to approach ETA with a clear understanding of the likely pathways to value creation. While each story is unique, our analysis reveals common patterns and evidence that most ETA CEOs generate value in similar ways. Spoiler alert: In our research, ETA firms often see the following: EBITDA margins fall significantly; revenue grows strongly, leading to moderate EBITDA growth; and EBITDA multiples expand sharply. We do not distinguish between organic and inorganic EBITDA growth (but that would be an interesting study). ETA participants can each forge their own arc; however, these trends are propelling search fund enterprises into the winner's circle, and it is important for CEOs and investors to internalize what they can reasonably expect and what may remain out of reach in their journey.

In this note, we examine a sample of ETA companies and analyze the factors driving enterprise value creation using mathematical and statistical methods. Our research questions are a) what

proportion of enterprise value change in ETA projects is influenced by EBITDA multiples versus EBITDA dollars, and b) which components—revenue growth, margin change, EBITDA compound annual growth rate (CAGR), timing, and entry multiples—predict swings in EBITDA multiples? Conventional ETA wisdom suggests that growth and margin expansion drive value. However, our results contradict these expectations.

There are no warm and fuzzy stories in this note featuring inspirational swashbuckling CEOs. Instead, it is just data and facts. As a result, the note will be fairly quantitative and dry, but we strongly encourage readers to stay with us and wade through the numbers and text because it is packed with fascinating outcomes and insights. We hope that reading it will help students, entrepreneurs, and capital providers better understand how value develops in ETA projects. We will do this through a five-step process (**Figure 1**). Let's dive in!

Figure 1: The roadmap for this note



Our methodology

To perform our analysis, we contacted a broad range of serial ETA investors with a request for unmasked data. Ultimately, we received information from six investors about companies in their portfolios that have fully exited; there are no interim mark-to-market valuations, and all of the firms are classified as traditionally funded searches. The generous investors provided details such as the company name; entry and exit figures for enterprise value, revenue, EBITDA, EBITDA margin, EBITDA multiple; and the dates of investment and exit. When investors only provided the year in which a company was acquired or sold, we assumed for simplicity that the purchase and sale occurred on January 1 of the respective year.

We compiled all the data and, after removing duplicate entries—since multiple investors might have reported on the same firm—we created a comprehensive dataset of 59 unique observations, which we are pleased with (**Exhibit 1**). For reference, according to the 2024 Stanford Graduate School of Business Search Fund Study, 168 traditional search funds have exited. In other words, we are capturing 35% of the known ETA population that has exited. We recognize that our dataset includes some observations from outside the U.S. and Canada, while the Stanford group is exclusively limited to the U.S. and Canada. Therefore, we are not making a direct apples-to-apples comparison.

To orient readers, we provide a quick and convenient overview of the data sample, based on aggregating values across all firms. We created two subsets of the data (**Figure 2**): One includes the entire sample, and the other excludes observations with exit EBITDA multiples of 20x or greater. These observations (exit

multiples of 20x or greater) probably relate to metrics other than EBITDA and could be influencing some of the trends. We will discuss the summary data in more detail below.

Figure 2: An overview of the data sample

	All observations	Ex 20x EBITDAx exits
Entry enterprise value	$995,787,413	$687,922,258
Enterprise value change	$2,973,624,564	$1,630,043,147
Exit enterprise value	$3,969,411,977	$2,317,965,405
Entry EBITDA	$158,239,825	$112,085,906
EBITDA change	$96,116,517	$95,639,237
Exit EBITDA	$254,356,342	$207,725,143
EBITDA CAGR	10%	14%
Entry revenue	$633,525,983	$488,901,939
Revenue change	$732,063,148	$602,515,588
Exit revenue	$1,365,589,130	$1,091,417,527
Revenue CAGR	18%	18%
Entry EBITDA margin	25%	23%
EBITDA margin change	(6%)	(4%)
Exit EBITDA margin	19%	19%
Entry EBITDA multiple	6.3x	6.1x
EBITDA multiple change	9.3x	5.0x
Exit EBITDA multiple	15.6x	11.2x
EBITDA multiple effect percentage	80%	64%
EBITDA dollar effect percentage	20%	36%
Revenue effect percentage	190%	144%
EBITDA margin effect percentage	(90%)	(44%)
Holding period in years (arithmetic mean)	4.8	4.8

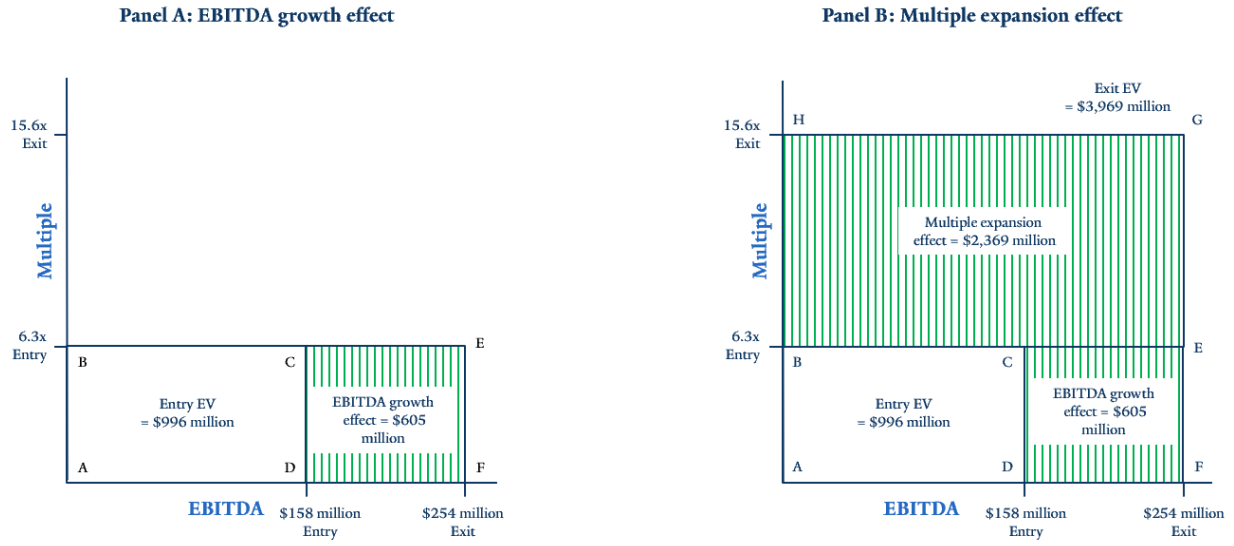
The dataset allows us to perform various mathematical and statistical analyses, which we will address. The core of the investigation is to decompose the creation of enterprise value during the holding period into the separate effects of changes in EBITDA (further bifurcated into revenue and EBITDA margin fluctuations) and EBITDA trading multiples. From **Figure 2**, we see that enterprise value (EV) grows from around $1 billion to $4 billion, representing about a fourfold increase. The enterprise value at entry and exit can be expressed as the corresponding EBITDA multiplied by an EBITDA multiple. In other words, the $3 billion increase in enterprise value comes from two sources: EBITDA increases from roughly $158 million at entry to $254 million at exit, and the multiple rises from 6.3x to 15.6x. This EBITDA multiple expansion is nothing short of stunning. The approximately 9-point growth, a 250% increase, is a dream scenario for investors and entrepreneurs. We cannot emphasize how extraordinary the uptick in EBITDA multiples is.

Next, we identify the contribution of each component to value creation: EBITDA growth and EBITDA multiple expansion. **Figure 3** illustrates the step-by-step calculations involved. We start with the entry EV of $996 million, represented by the rectangle ABCD in **Panel A**, on the left. To assess the impact of EBITDA growth, we multiply the EBITDA increase by the entry EBITDA multiple of 6.3x to estimate approximately $605 million in EV creation (i.e., [$254 million – $158 million] * 6.3x). This shows how much value is generated when EBITDA rises from $158 million to $254 million while the multiple is held constant at its entry level. This increase in EV, reflecting EBITDA growth, is shown by the hatched area DCEF, shaded green to indicate positive value creation.

To estimate the EV creation from multiple expansion, we calculate the product of the growth in multiples of the exit EBITDA of $254 million. That is, holding EBITDA constant at its exit level, we determine how much value is generated by increasing the EBITDA multiple from 6.3x to 15.6x. This source of EV creation

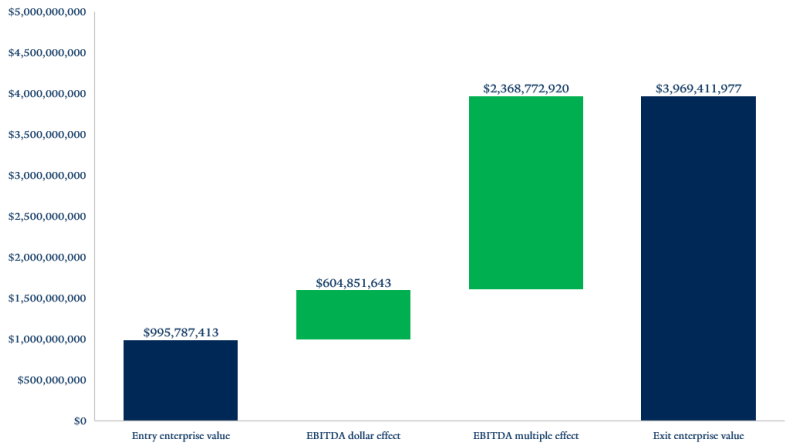
is shown by the green shaded area BHGE in **Panel B**, to the right. It turns out to be a colossal $2.4 billion! Combined, the increase in EV from $996 million at entry to $4 billion at exit can be attributed as follows: approximately 20% ($605 million) to growth in EBITDA, and the remaining 80% ($2.4 billion) to multiple expansion.

Figure 3: Attribution of enterprise value creation to EBITDA growth and EBITDA multiple expansion



We recast these aggregate results as waterfalls (**Figure 4**) to visually emphasize the relative magnitudes. The approximately $3 billion increase in value is mainly due to $2.4 billion (80%) from EBITDA multiple effects and $0.6 billion (20%) from EBITDA dollar effects. We suspect that many ETA observers might not expect EBITDA multiple effects to be as high as 80%, thinking that ETA generals are more skilled at growing the business. That is certainly what we expected to find. However, our data rapidly indicates that EBITDA multiple effects are the primary driver (by a factor of 4) and account for most of the enterprise value creation. While one vector dominates, both are positive contributors to the value-creation effort.

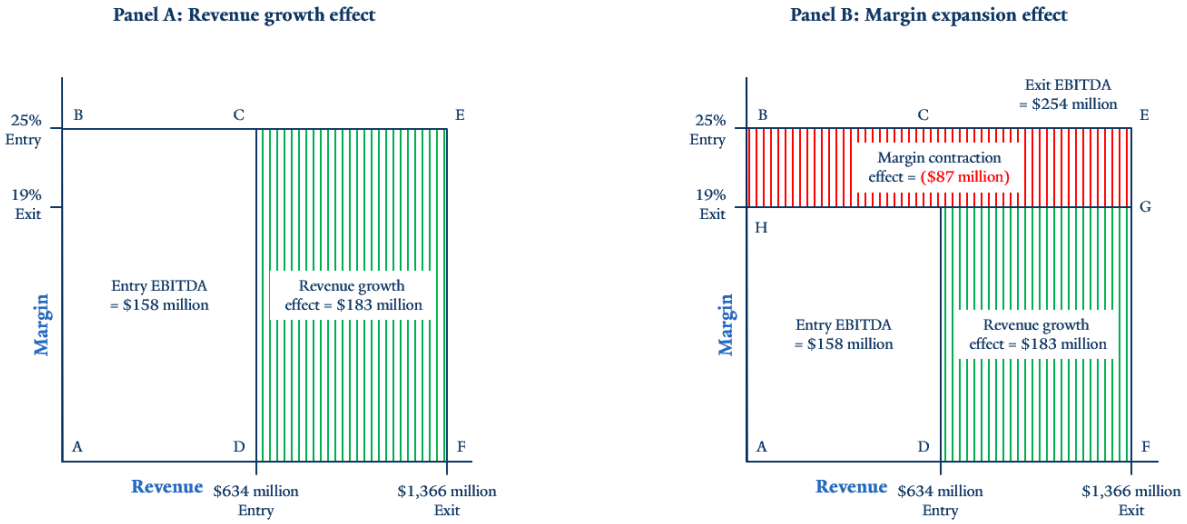
Figure 4: Aggregate enterprise value waterfall



We can go a layer deeper by decomposing the EBITDA effect into its two underlying dimensions: revenue shifts and EBITDA margin fluctuations, as shown in **Figure 2**. We already know that EBITDA increases from approximately $158 million to $254 million, a roughly 60% growth. EBITDA at entry and exit can be seen as the corresponding revenue multiplied by an EBITDA margin. That is, the $96 million EBITDA growth arises from two sources: Revenue increases from approximately $634 million at entry to $1.4 billion at exit, and the EBITDA margin *contracts* from 25% to 19%.

We start with the entry EBITDA of $158 million, indicated by the rectangle ABCD in **Panel A** on the left side of **Figure 5**. Keeping the EBITDA margin at its initial level, we calculate how much value is created when revenue grows from $634 million to $1.4 billion. To evaluate the impact of revenue growth, we multiply the revenue increase by the initial EBITDA margin of 25%, yielding approximately $183 million in EBITDA growth (i.e., [$1.4 billion – $634 million] * 25%). This increase in EBITDA, reflecting revenue growth, is represented by the green, hatched area DCEF. To estimate the *negative* impact of margin contraction on EBITDA, we multiply the reduction in margin by the exit revenue of $1.4 billion. This means, keeping revenue constant at its exit level, we assess how much EBITDA is lost when margins drop from 25% to 19%. The source of this EBITDA loss is shown by the red shaded area BHGE in **Panel B**, on the right. It is approximately $87 million. Overall, the increase in EBITDA from $158 million at entry to $254 million at exit—an increase of $96 million—can be explained as follows: about 190% ($183 million) comes from revenue growth, while the remaining 90% ($87 million) results from EBITDA margin contraction.

Figure 5: Attribution of EBITDA growth to revenue growth and margin expansion or contraction



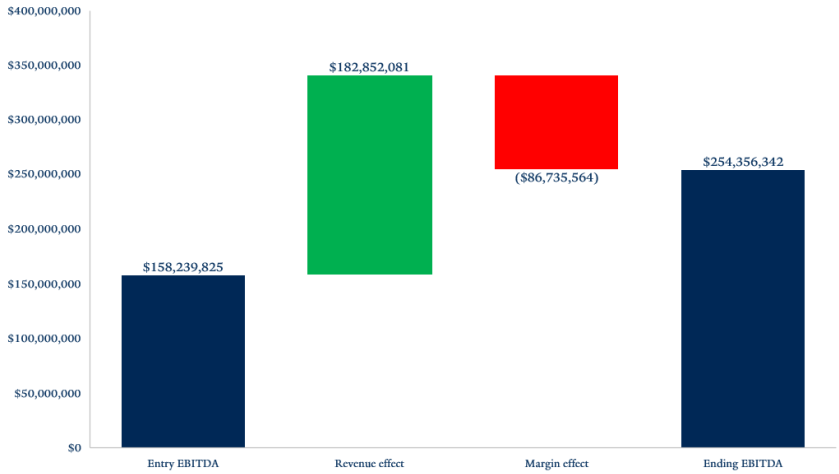
The waterfall equivalents of our results in **Figure 5** are provided below in **Figure 6**. Our ETA commanders purchased $158 million of EBITDA and increased it to $254 million over their respective holding periods. As we discovered above, what is fascinating to see is that the $96 million net change results from adding $183 million in revenue but also shrinking by $87 million due to negative EBITDA margin effects. In other words, revenue effects contribute 190%, and EBITDA margin effects subtract 90%.

If readers try to reconcile the $605 million EBITDA dollar effect in **Figure 4** above with the $96 million change shown in **Figure 6** below, they need to remember that the EBITDA dollar effect is derived from

applying an EBITDA multiple to the $96 million EBITDA change. In this case, the relevant EBITDA multiple is the entry multiple of 6.3x.

Once again, we believe ETA observers would expect EBITDA margin effects to be positive, indicating skilled operations. However, in our sample, EBITDA margins decline from 25% at entry to 19% at exit (a 25% decrease). It is common wisdom in ETA circles that ETA CEOs are superior operators compared to inattentive sellers. In this context, we mean the ability to extract more EBITDA dollars from a dollar of revenue. Our data indicates that, in aggregate, this is simply not true. EBITDA margins consistently flag.

Figure 6: Aggregate EBITDA dollar effect waterfall



We can combine the two sets of calculations by distributing the EBITDA effect percentage into revenue and EBITDA margin impacts. To do this, we simply multiply the revenue effect and EBITDA margin effect percentages (190% and –90%, respectively) by the EBITDA effect percentage (20%). The total EV creation across our sample can be viewed as originating from three sources: 80% from EBITDA multiple expansion, 39% from revenue growth, and –18% from EBITDA margin contraction. (The sum exceeds 100% because of rounding effects.) Voila, we have fully decomposed the enterprise value changes into their individual components. **Figure 7** provides a clear summary of this breakdown.

Figure 7: Combined sample enterprise value-creation effects

EBITDA multiple effect	$2,368,772,920		80%
EBITDA dollar effect	$604,851,643		20%
EBITDA change	$96,116,517		
Revenue effect	$182,852,081	190%	39%
Margin effect	($86,735,564)	(90%)	(18%)
Sum			**100%**

This analysis serves as the foundation of our study. Two key takeaways: EBITDA multiple effects are highly significant, and revenue effects are much more common than EBITDA margin effects. If we were to

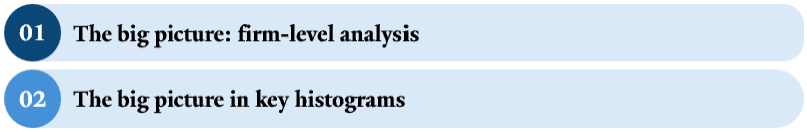
conclude our note here, we believe the results reported would be meaningful and impactful. However, there is much more exciting data, analysis, and insight to come, so keep reading. We also conduct and produce various regressions, histograms, and stacked bar charts to help identify patterns and relationships in the value-creation dissection. These include exploring correlations and linkages in different growth rates and temporal dimensions. There is much to report, digest, and synthesize here. Everything is fascinating and offers insights into how ETA firms actually create value and generate returns.

Univariate results

In this section we will confirm that our aggregate results are representative of patterns observed at the firm level within the sample. We will quickly identify patterns that shape our understanding of value-creation dynamics. We will not combine multiple variables in our analyses yet, but will in the note's next section.

We will now discuss two analyses related to ETA firms' enterprise value attribution (**Figure 8**).

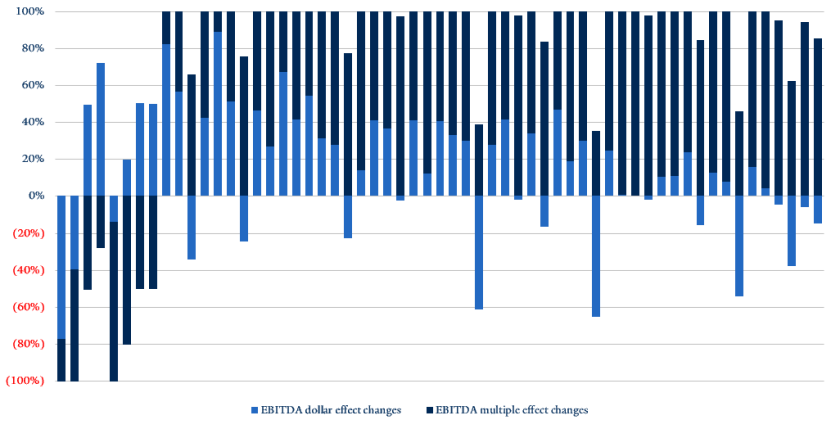
Figure 8: The results we will examine



01 *The big picture: firm-level analysis*

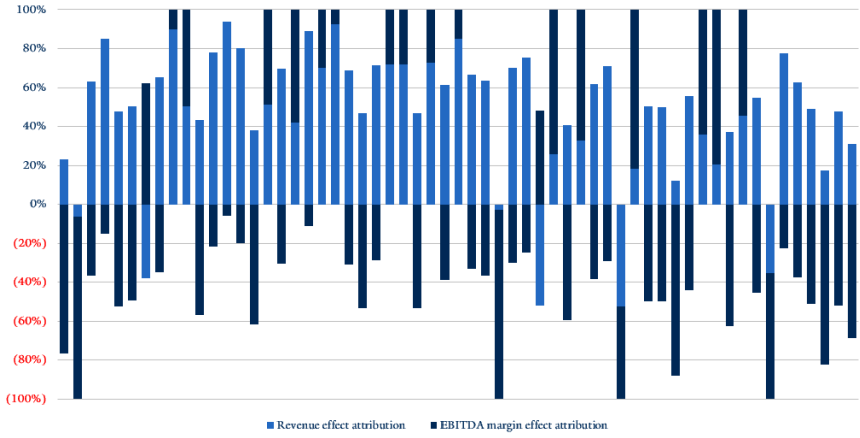
Skeptical students and readers might examine the analysis we present and argue that the overall results may obfuscate firm-level differences within our sample. In other words, how well do the main takeaways reflect the typical search firm? In **Figure 9**, we show a 100% stacked bar chart of all 59 observations in our sample, illustrating the relative contributions of changes in EBITDA dollar effects and EBITDA multiple effects. The chart confirms that the overall picture of the enterprise value waterfall in **Figure 4** is representative. The EBITDA multiple decreases for only eight of the 59 firms, and for most firms, EBITDA multiple expansion (shown in navy blue) contributes more value than EBITDA dollar growth (shown in light blue). We might even say that the default scenario in our sample is EBITDA multiple–driven rather than EBITDA dollar–driven.

Figure 9: 100% stacked bar chart with EBITDA dollar and EBITDA multiple effects for all firms



In **Figure 10** below, we further confirm that the overall EBITDA waterfall (shown in **Figure 6**) occurs at the firm level. While most firms show revenue growth (light blue), more than two-thirds of the sample experience margin contraction (navy blue). EBITDA margin seems elusive, at least in our dataset.

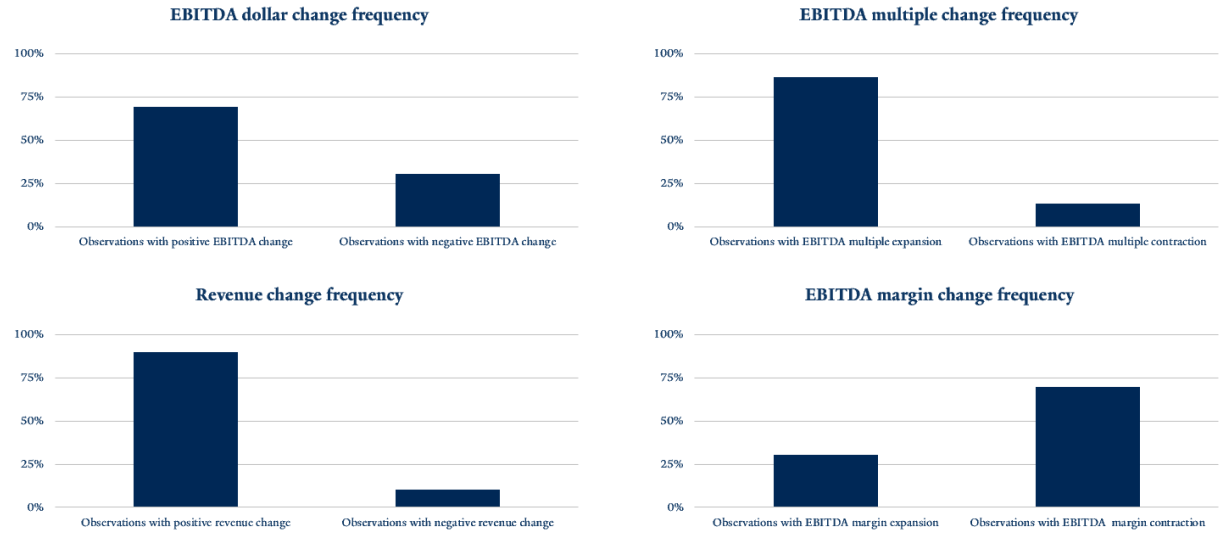
Figure 10: 100% stacked bar chart with revenue and EBITDA margin effects for all firms



02 *The big picture in key histograms*

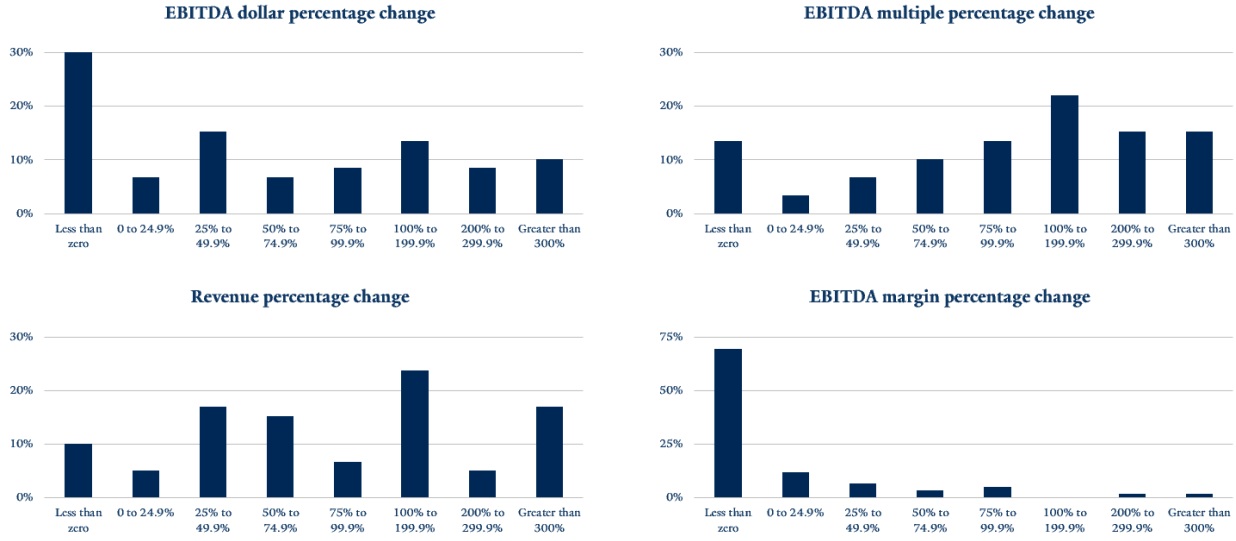
To clarify how different toggles impact enterprise value creation, we created several bar charts and histograms. In **Figure 11**, four bar charts depict a simple win-loss view for each vector considered at the aggregate level in **Figures 4** and **6** and at the firm level in **Figures 9** and **10**. Starting with EBITDA dollar fluctuations, 70% of the sample experienced positive changes, while 30% saw declines. The story for EBITDA multiples is slightly more skewed, with nearly 90% of firms benefiting from EBITDA multiple expansion and just over 10% facing contraction. Among EBITDA dollar changes, 90% of firms gain from positive revenue growth, and 10% encounter revenue declines. Most notably, only 30% of the sample see EBITDA margin expansion, while 70% experience a reduction in EBITDA margins. These four charts highlight the underlying patterns in the dataset's path to enterprise value creation. Overall, this narrative is dominated by EBITDA trading multiple growth and is influenced by revenue increases and shrinking EBITDA margins.

Figure 11: A win-loss perspective on the factors influencing enterprise value creation



We can decompose the directional win-loss view into finer histograms, providing a clearer picture of the magnitude for each dimension (**Figure 12**). We already know that 30% of firms shrank EBITDA dollars. The 70% of firms that increased EBITDA dollars did so across various bins, with the most common being 25% to 49.9%. For all firms, 32% at least doubled EBITDA dollars. Regarding changes in EBITDA multiple, the most popular bin is 100-199.9%, and 53% of firms at least doubled the EBITDA multiple during the holding period. For revenue effects, once again, the most frequent bin is 100-199.9%, and 46% of firms at least doubled their revenue during operation. Lastly, EBITDA margin effects show that 70% of firms experienced negative changes, 12% increased EBITDA margins by at least 24.9%, and only 4% of firms at least doubled EBITDA margins.

Figure 12: Histograms showing the magnitude of changes in the factors affecting enterprise value creation



No matter how we analyze the data, we observe ETA firms winning the enterprise value-creation contest with notable positive EBITDA multiple changes and modest EBITDA dollar increases driven by revenue growth, not EBITDA margin effects. We suspect that ETA observers expected EBITDA multiple expansion to play an important role in enterprise value creation, but perhaps not as strongly as our data suggests. We also imagine that many spectators are surprised by the pervasiveness of EBITDA margin contractions.

Multivariate analysis of the determinants of EBITDA multiple expansion

A key result from our decomposition of value creation in the ETA space is the clear importance of multiple expansion—the increase between entry and exit EBITDA multiples. We suspect that readers, entrepreneurs, and investors will want to be confident they are capitalizing on the EBITDA multiple opportunity. We understand why; it acts as an elixir that makes CEOs appear smarter and more capable than they might be, and expanding EBITDA multiples offers a double dip. First, the previously acquired dollars are automatically marked up as more valuable, and second, any new EBITDA dollars added to the system are valued at the novel EBITDA multiple.

In the remainder of this note, we examine the relationship between multiple expansion and the factors that likely explain its amplification. At a simple level, multiples are driven by two factors: They should increase with future growth prospects and move inversely with the expected rate of return or discount rate (EBITDA multiples rise when discount rates fall). The expected rate of return is itself determined by a bevy of factors, including prevailing risk-free rates, risk premia, and liquidity (the odds of finding a willing buyer or seller). In our analyses below, we first consider factors that might explain the levels of entry and exit multiples and then examine whether changes between entry and exit in those variables account for multiple expansion over the holding period.

One additional factor that may be relevant here, particularly in explaining why multiples increase over time, is excess buyer demand (demand exceeding sellers' supply). Excess demand means buyers are willing to pay a higher price for the same cash flows; in other words, they are willing to accept a lower rate of return. For entry multiples, the idea is that more searchers are chasing a fixed number of founders. For exit multiples, it is that an increasingly large pool of private equity (PE) and other buyers grows faster than the searchers (and other sellers) can supply investments.

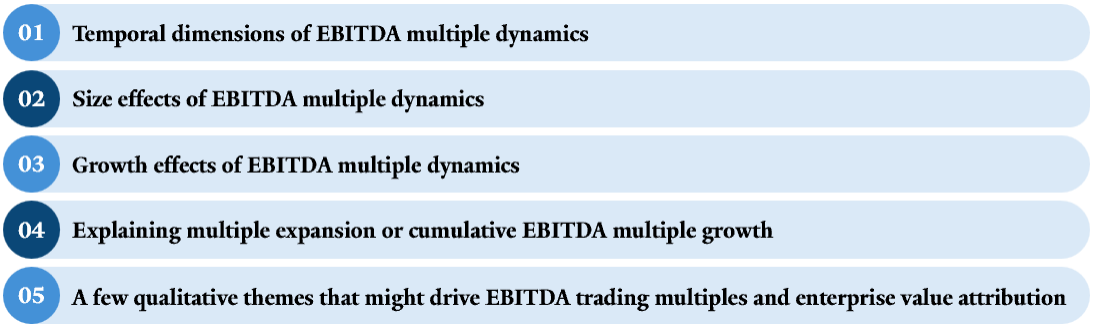
Investigating the determinants of multiple expansion relates to two other discussions about the source of value creation that ETA investors and CEOs often explore. The first examines how much of the value creation comes from situational factors like CEO skill and effort versus macro factors such as timing and serendipity coming from the environment. The second assesses how much of the value creation is "alpha," or earning a return above the expected rate of return, and how much is "beta," which influences the expected rate of return. Roughly speaking, alpha reflects CEO skill and effort, while beta reflects macroeconomic factors outside the CEO's control.

In an ideal world, our analysis of multiple expansion would distinguish between skill and effort versus chance, as well as between alpha and beta. Unfortunately, we are unable to do this. Instead, our goal is to present evidence on the relationship between multiple expansion and relevant variables in our dataset. We will develop hypotheses based on the results we observe. However, we cannot, with certainty, provide guidance to CEOs or investors on how to improve EBITDA multiple expansion. Additionally, as we examine relationships between different dimensions and EBITDA multiple changes, we cannot necessarily

speak to causality beyond the statistical association. In other words, correlations may exist; however, they do not necessarily establish a cause-and-effect relationship.

We will now present a pentad of analyses on multivariate methods in our enterprise value-creation attribution study (**Figure 13**).

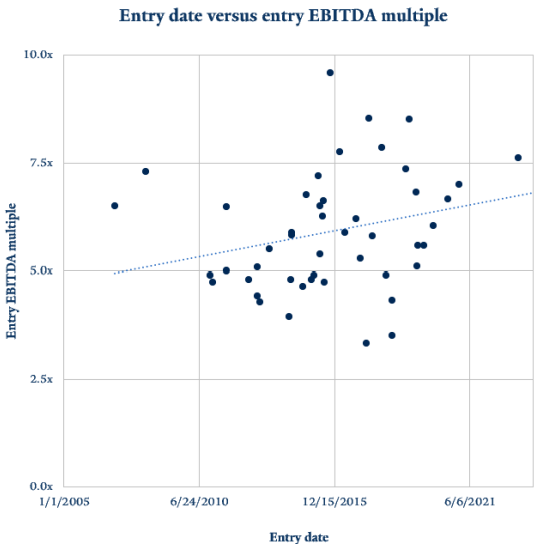
Figure 13: The quintet of topics we will discuss in this section

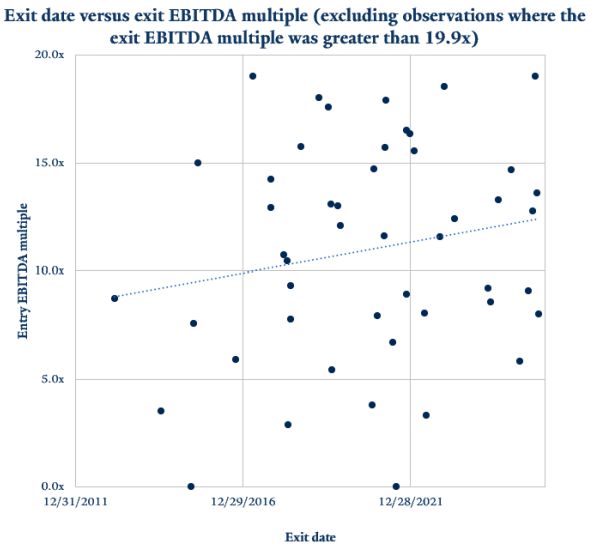


01 *Temporal dimensions of EBITDA multiple dynamics*

We begin with plots of entry and exit multiples over time (**Figure 14**) to illustrate the overall levels of these multiples and their upward trends. The two trend lines below show that entry and exit multiples were roughly 5-10x at the start of our sample and grew to about 7-14x by the end. Note that the Y-axis scales are different, with the left panel capped at 10x and the right panel's maximum at 20x. Throughout our sample, entry and exit EBITDA multiples have increased over time. As a result, multiple expansion is due to two factors: At each point in time, exit multiples are about twice as high as entry multiples, and exit multiples move up further during the firm's lifespan.

Figure 14: Entry and exit EBITDA multiples over time (excluding observations where the exit EBITDA multiple was greater than 19.9x)



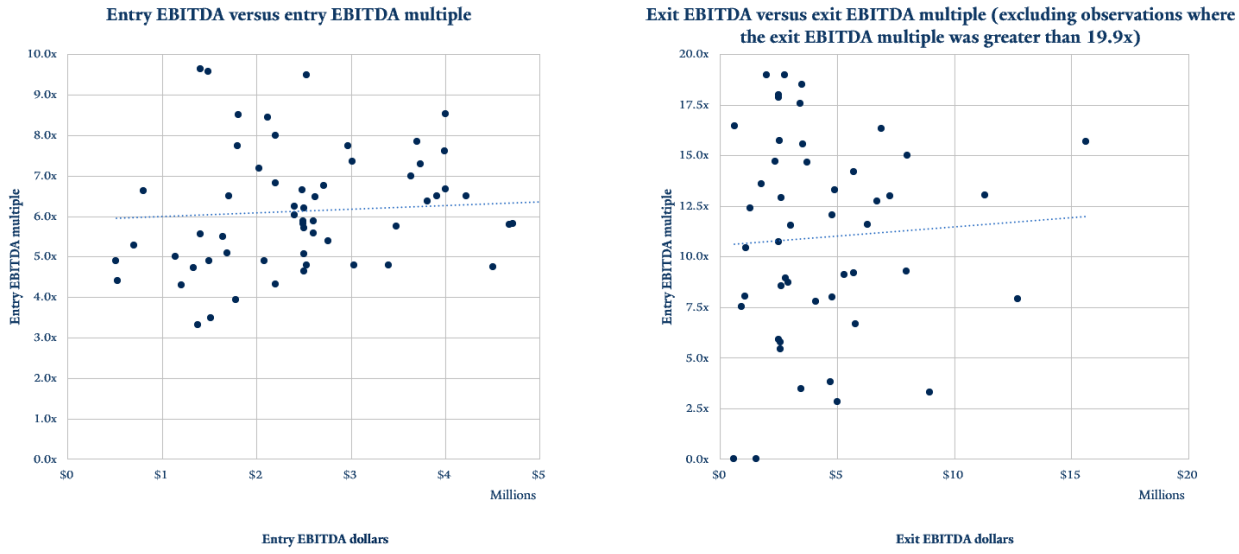


A fair question to ask now is, "Why are entry and exit multiples increasing over time?" One possible reason is that firms grow over time and multiples increase with firm size. We consider that explanation next. Another possibility is that excess demand in both entry and exit markets has increased, resulting in lower required rates of return. Finally, increased use of sophisticated intermediaries might raise transaction values.

02 *Size effects of EBITDA multiple dynamics*

EBITDA multiples should align with firm size, measured by EBITDA dollars. Larger cash flow streams are generally seen as more stable and less risky than smaller ones. As a result, bigger companies tend to command higher EBITDA multiples than smaller firms. To test this idea in ETA land, we plotted entry and exit EBITDA multiples against EBITDA dollars (**Figure 15**). In the left panel, showing entry multiples, there is a slightly positive trend, indicating a weak positive correlation between entry EBITDA multiples and rising EBITDA dollars. In the right panel, we compare exit EBITDA dollars to exit EBITDA multiples. We observe a notable increase in exit multiples compared to entry multiples, and, as expected, exit EBITDA multiples rise with larger EBITDA levels.

Figure 15: Entry and exit EBITDA multiples as a function of EBITDA dollars (excluding observations where the exit EBITDA multiple was greater than 19.9x)



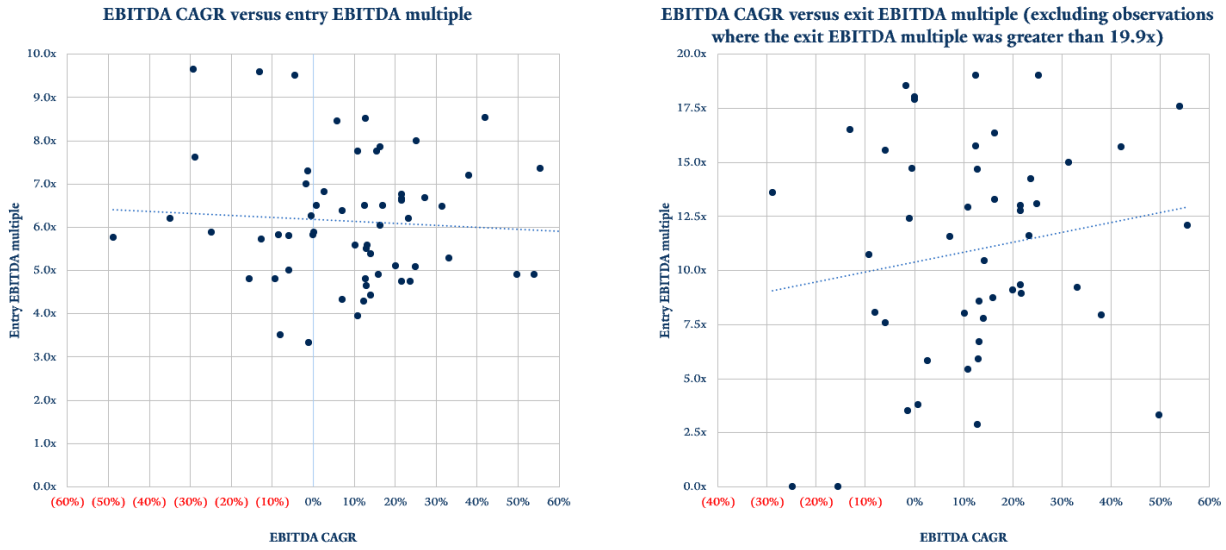
The old adage that bigger is better when selling an ETA-like firm holds true in our dataset and is a key reason why ETA companies achieve higher exit trading multiples. More EBITDA dollars can clearly be attributed to CEO skill and situational factors; it is alpha, even if some EBITDA growth is due to overall market expansion.

03 *Growth effects of EBITDA multiple dynamics*

EBITDA trading multiples should be higher for companies with greater expected future growth. We only have growth data for the duration of the firm's existence, not for periods before entry or after exit. We anticipate a positive relationship between EBITDA CAGR growth and both entry and exit multiples. In

theory, EBITDA growth should be more closely linked to entry multiples reflecting future growth expectations than to exit multiples, but we find no correlation with entry multiples and a positive correlation with exit multiples (**Figure 16**). The non-result regarding entry multiples is puzzling and may again indicate that ETA CEOs are skilled at asset acquisitions. Additionally, the upward exit trend suggests that ETA CEOs are successfully crafting a future (post-exit) growth story in the sale process.

Figure 16: Entry and exit EBITDA multiples as a function of EBITDA CAGR (excluding observations where the exit EBITDA multiple was greater than 19.9x)

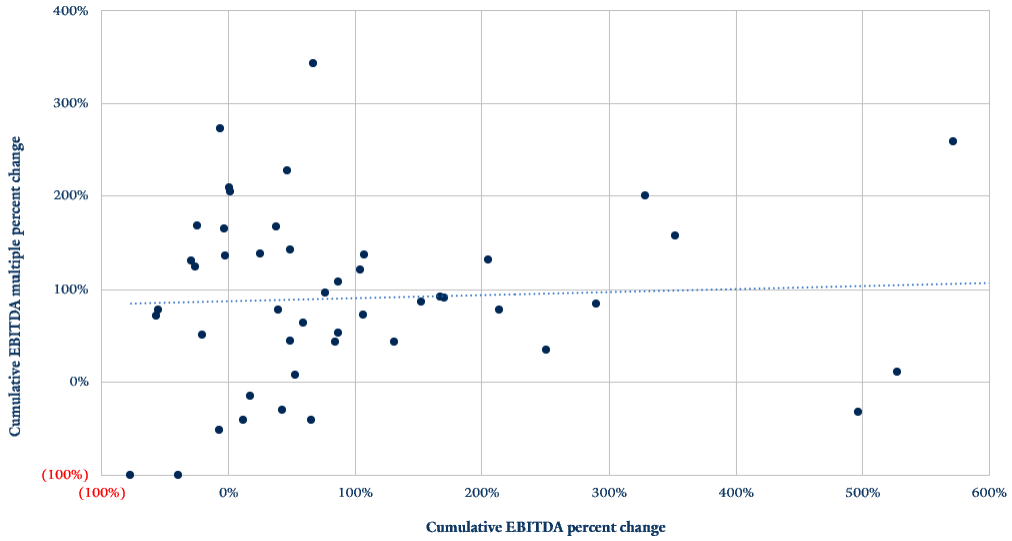


Before moving from entry and exit multiples to multiple expansion over the holding period, let's summarize the insights gained so far. First, we cannot fully account for most of the variation in entry and exit multiples. The increasing association with calendar time, firm size, and growth accounts for some of the variation. Second, we can only partially explain why multiples in the entry and exit markets differ so much. Some of the increase is probably due to the passage of time and firm growth. However, our plots suggest that firms of similar size at the same point in time are valued at substantially higher multiples in exit markets. Finally, we are also unable to clearly separate how much of the multiple expansion is due to CEO effort and skill. The upward trend in multiples over time likely reflects macroeconomic factors, while CEOs probably deserve credit for multiples increasing with size and growth, since these are operational parameters.

04 *Explaining multiple expansion or cumulative EBITDA multiple growth*

We will shift our discussion from nominal EBITDA multiples and dollar amounts to how these metrics change during the holding period. To demonstrate this, we present a plot in **Figure 17**, showing cumulative EBITDA growth as a percentage on the X-axis and cumulative EBITDA multiple growth as a percentage on the Y-axis. In the figure, excluding observations with exit multiples greater than 19.9x, we observe no relationship between cumulative EBITDA percentage changes and cumulative EBITDA multiple percentage changes. This suggests that it does not matter to buyers what the percentage change in EBITDA is; CEOs are neither rewarded nor penalized with EBITDA multiple percentage changes between entry and exit. The trendline shows that EBITDA trading multiples are roughly double, regardless of circumstances.

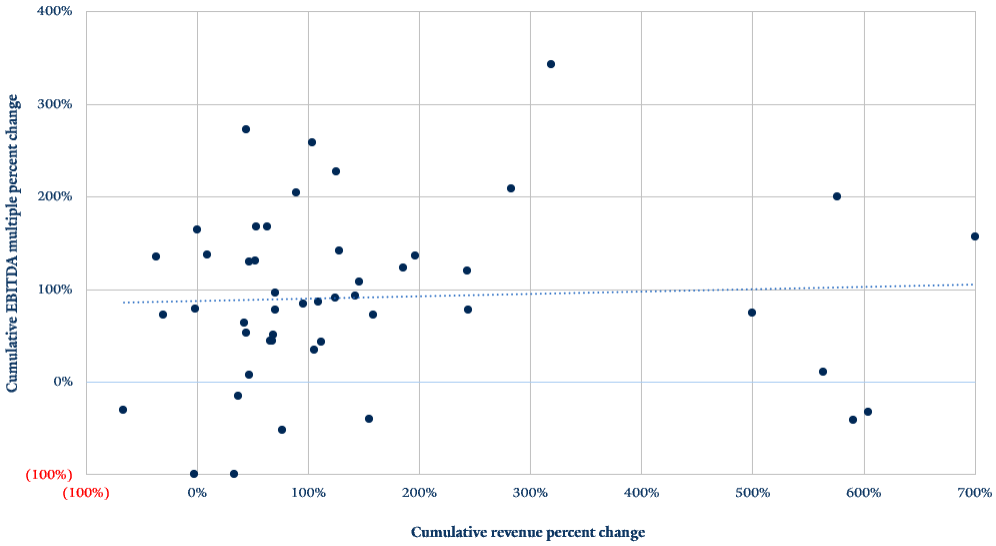
Figure 17: Cumulative EBITDA growth effects versus cumulative EBITDA multiple growth (excluding observations where the exit EBITDA multiple was greater than 19.9x)



Readers should not confuse these regressions with those shown in **Figure 15** above. They are cousins, but here we focus on percentage changes and behaviors associated with those movements, while previously we analyzed raw EBITDA and EBITDA multiples and their relationships.

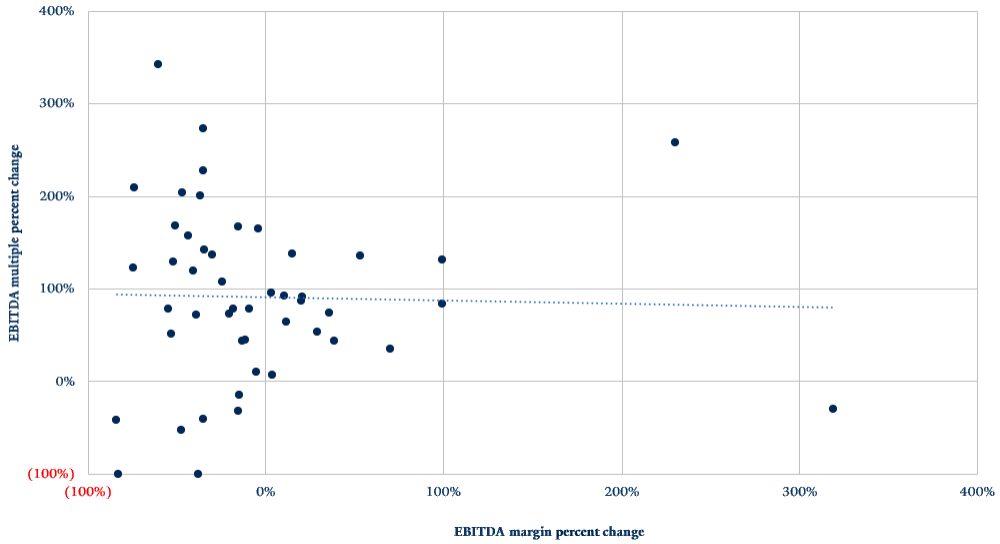
We now analyze whether changes in EBITDA components indicate that multiple expansion is associated with higher EBITDA margin growth or higher revenue growth, as EBITDA components evolve. We find that EBITDA multiple expansion is unrelated to revenue growth but is strongly negatively associated with margin compression across all observations. In **Figure 18**, we observe that changes in cumulative revenue percentage are not informative for changes in EBITDA multiple percentage when excluding observations with exit multiples exceeding 19.9x.

Figure 18: Cumulative revenue growth effects versus cumulative EBITDA multiple growth (excluding observations where the exit EBITDA multiple was greater than 19.9x)



We will now explore the cumulative percentage EBITDA margin effects. **Figure 19**, which excludes firms with an EBITDA exit multiple greater than 19.9x, shows no link between cumulative EBITDA margin improvements and EBITDA multiple changes. In other words, ETA buyers do not seem to prioritize EBITDA margin improvements or degradation.

Figure 19: Cumulative EBITDA margin growth effects versus cumulative EBITDA multiple growth (excluding observations where the exit EBITDA multiple was greater than 19.9x)



Having examined the individual relationships between EBITDA multiple expansion and potential determinants, we perform a final analysis that explores their combined relationship. Specifically, we regress the share of value attributable to EBITDA multiple expansion on revenue, margin, and size effects (**Figure 20**). This creates a link between univariate attribution and multivariate drivers. We also include holding period as an additional variable to see if it explains multiple expansion. Whereas we find no relation between multiple expansion and these variables when considering them one at a time, we find two significant relationships when we consider them jointly in the multiple regression: Multiple expansion is positively related to revenue growth and negatively related to margin growth. While the positive coefficient on revenue growth is expected, the negative coefficient on margin growth is a surprise. It suggests a trade-off between EBITDA margin contraction and EBITDA multiple expansion. CEOs investing in their companies and preparing for future growth, rather than focusing solely on optimizing current EBITDA margins, will likely experience margin contraction but be rewarded with higher EBITDA exit multiples. We emphasize that readers should not interpret this result as implying that lowering margins will lead to greater multiple expansion.

Figure 20: Statistical analysis of the percentage of enterprise value change from EBITDA multiple effects

Share of value from multiple expansion (excluding observations where the exit EBITDA multiple was greater than 19.9x)				
The dependent variable is the percentage of enterprise value change from the EBITDA multiple effects				
	Regression statistics			
Multiple R	0.690023			
R Square	0.476132			
Adjusted R Square	0.4274			
Standard Error	18.65094			
Observations	48			
	Coefficients	Standard error	t Stat	P-value
Intercept	-8.62292	11.3737	-0.75815	45%
EBITDA margin cumulative percent change	-19.2488	4.293374	-4.48338	0%
Revenue CAGR	40.96769	20.52437	1.996051	5%
Entry EBITDA	-2.6E-07	2.8E-06	-0.09189	93%
Holding period (years)	-0.07469	1.374321	-0.05434	96%

05 *A few qualitative themes that might drive EBITDA trading multiples and enterprise value attribution*

There are additional unobservable and non-quantitative factors in ETA land that can lead to amplified EBITDA trading multiples, which in turn result in juicy IRRs and cause enterprise value attribution to be more aligned with EBITDA multiples than with EBITDA dollars.

Climbing the private equity ladder. As assets move up the private equity ladder to larger firms, the required returns usually decrease. ETA investors seek returns in the 30s, while mega-cap PE firms probably target returns in the teens. As assets progress, EBITDA multiples generally rise, assuming all other factors stay the same. Selling to a buyer with a lower cost of capital usually leads to a higher valuation, as shown in the EBITDA trading multiple.

Midmarket PE firms seek platform assets. If an ETA firm grows large enough to serve as a platform in a midmarket PE firm's consolidation plan, the acquiring firm might initially pay a premium, anticipating that it can acquire add-on acquisitions at lower costs and reduce the overall portfolio purchase multiple through synergies. We will not evaluate the effectiveness of this strategy; however, when a PE firm falls in love with a potential platform target, it may act aggressively, pushing up the EBITDA multiple and the seller's IRR.

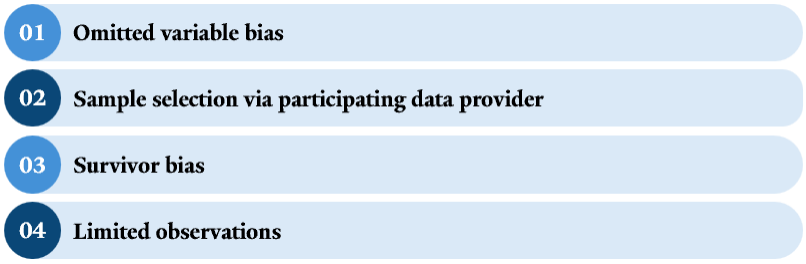
A strategic acquirer recognizes post-acquisition synergies. When a strategic acquirer—someone already operating in the target company's industry—is considering an ETA firm as part of a roll-up program, they might value the target based on field-level EBITDA instead of net EBITDA. This is because shared services costs below the field EBITDA will be eliminated after the acquisition. For example, if a public acquirer trades at 20x EBITDA, they might be willing to pay the seller an elevated 15x net EBITDA, expecting that after closing, the buyer will rationalize 15x down to 8x, creating twelve points of arbitrage. Whether this actually happens is not the seller's concern; they will simply enjoy a high EBITDA multiple valuation. Strategic buyers do not want to share all of the arbitrage opportunity with sellers, but they may be willing to share some of it to facilitate a transaction. In this context, the asset has different value in the hands of the buyer compared to the seller.

Investment bankers excel at their roles. When search fund entrepreneurs buy a company, they tend to do so through a proprietary or lightly intermediated process. However, when ETA CEOs sell their companies, they engage middle-market investment banking barracudas who run ferocious auctions on the sell side. These bankers produce slick offering memorandums and manage highly orchestrated processes designed to push potential buyers into nosebleed valuations. Management meetings, fireside chats, data rooms, debt staples, second-round offers, and best-and-final offers all help drive potential buyers further up the valuation ladder. We used to think that a good banker, not even an exceptional one, was worth a multiple of EBITDA in the sale battle. In today's frothy markets, where double-digit EBITDA multiples are common, an excellent banker might be worth even more than two turns. Bankers are not Machiavellian, forcing buyers to do things they do not want to do; rather, through their ratcheting compensation schemes, they are incentivized and exceptional at pushing buyers to their absolute brink. All of this results in higher EBITDA multiples, and greater enterprise value attributed to EBITDA multiples.

Limitations

Although we are extremely excited about this note and its research, we recognize that it is not perfect and has inherent limitations (**Figure 21**). We study small private ETA companies and rely on generous data providers to compile relevant datasets. It is a hunt-and-peck process that is far from flawless. However, while we acknowledge the limitations and would never assert that our analyses are pinpoint perfect, we do believe they are directionally accurate. Moreover, our assessments are based on data, statistics, and mathematical analyses; they are not our opinions. We are researchers who analyze data and report the results. We see four main groups of limitations in our study.

Figure 21: Study limitations we will discuss



01 *Omitted variable bias*

When a statistical model leaves out one or more important variables that could affect its conclusion, this is known as omitted variable bias. We may have intentionally or unintentionally excluded relevant variables in our analyses. For instance, we have not considered factors such as each firm's industry, location, and temporal cohort or the strategy employed by each company. These are essential elements that could influence the attribution of enterprise value. Additionally, we have not incorporated leverage in any way, which can be a significant factor when evaluating value creation.

02 *Sample selection via participating data provider*

We deeply appreciate the six investors who kindly provided data for this project. However, with hundreds of ETA investors, there might be similarities in investor style, strategy, or results. Of course, we wish more

investors had participated; however, this particular study required extensive firm-level data that some investors might not find relevant or track in any way. Therefore, we used the data we were able to collect.

03 *Survivor bias*

Our study focuses on firms that meet specific criteria for which we can collect data. Additionally, this group mainly consists of successful companies—firms with favorable outcomes suitable for analyzing enterprise value gains. We excluded companies with negative EBITDA at exit because a negative figure cannot be meaningfully used in a value analysis.

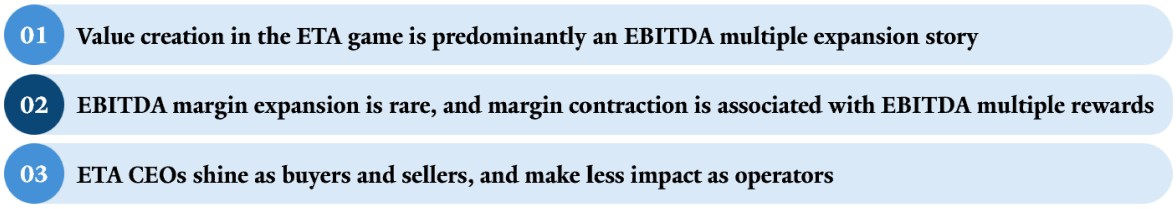
04 *Limited observations*

Our dataset includes 59 observations, which drops to 48 after excluding those with an exit EBITDA multiple above 19.9x. While this is a reasonable size for ETA firms that have exited, we, of course, wish it were larger. There is some risk that our sample is biased and not representative of the entire population. We cannot confirm this because we lack data on the population.

Key insights

Thanks for sticking with us through all the math and statistics. We know that readers are overwhelmed with information and numbers at this point. We understand, but the data are real, fascinating, and essential, providing valuable insights that we will now highlight and discuss (**Figure 22**). If we had to sum up these insights simply and concisely, it would be that search fund players heavily rely on EBITDA multiple augmentation—that is the core of the story. It might not be breaking news to ETA insiders, but we attach data and scale the magnitude of the impact.

Figure 22: Key takeaways and insights



01 *Value creation in the ETA game is predominantly an EBITDA multiple expansion story*

In our analyses, all roads lead to the unequivocal conclusion—enterprise value creation is primarily driven by EBITDA multiple expansion across all scenarios. Search fund CEOs excel at creating value through the sales process. ETA capital providers and ETA CEOs must understand that a significant part of their success depends on achieving substantially higher multiples at exit than at purchase, implicitly making a wager on market beta. This marks a sharp departure from the origins of search funds, where no EBITDA multiple expansion was assumed. Today, it seems reasonable for investors and CEOs to anticipate nearly doubling multiples from entry to exit. Historically, achieving double-digit EBITDA multiples on exits for lower-middle-market companies was considered a fantasy; now it has become standard. If this trend shifts within the ETA landscape, we believe investors and entrepreneurs will face considerable challenges in maintaining current return profiles.

Furthermore, since ETA is mainly an EBITDA multiple expansion phenomenon, investors might consider how ETA CEOs are compensated and whether the current remuneration scheme rewards systemic market trends and beta more than CEO skill and alpha. If it is reasonable to believe, as our data suggests, that many ETA companies will trade at low to mid-teens exit EBITDA multiples, is that genuinely the CEO's actions or a reflection of broader market forces? We acknowledge that some CEOs receive expanded exit EBITDA multiples because they improved the business, even if they did not necessarily grow it. They implemented new ERP systems, secured contracts with all customers, upgraded the management team, and generally reduced risk while positioning the asset for a fresh growth phase for the next buyer. We see this work as skillful and alpha, but at least some of the EBITDA multiple expansion is beta. We are unsure how to fully disentangle the structural and situational factors behind EBITDA multiple expansion, but we believe that at least part of the CEO's equity rewards are linked to beta.

Finally, we encourage investors and CEOs to consider the timing of cash flows in the ETA arena. Since most of the value comes from EBITDA multiple expansion—a back-end event—there is increased risk due to the heavy reliance on terminal value. Compare this common scenario with a company that generates cash from operations, which can be used for dividends or reinvestment in the firm. IRR is the ultimate metric, but we might accept some trade-offs in IRR points for earlier cash flows instead of a single payout at the end that depends on hitting the EBITDA multiple market perfectly.

02 *EBITDA margin expansion is rare, and margin contraction is associated with EBITDA multiple rewards*

EBITDA margins consistently melt during ETA ownership. The trend is clear and irrefutable. ETA investors and CEOs should approach their ownership reign assuming EBITDA margins will flag. They should incorporate this into cash flow forecasts and consider it in relation to debt covenants. What is surprising about this trend is that we often see confidential information memoranda at purchase showing increasing EBITDA margins; directionally, that is not the case in reality. Furthermore, when we discuss margins with investors, they often claim that their portfolio companies are growing EBITDA margins until they review the data.

Attenuating EBITDA margins should not necessarily be viewed as a failure or a sin on the CEO's part, as it is associated with an increase in EBITDA multiples. We believe the story of EBITDA margins can be divided into two categories: intentional and unintentional. When CEOs choose to sacrifice margins as an investment in the company's infrastructure, it is a deliberate and conscious bet. For example, if ETA maestros are reducing EBITDA margins to invest in shared services and operations, using cash for non-capitalizable customer-acquisition activities, or making investments tied to scaling with deferred payoffs, these are courageous strategic choices and can be characterized as desirable EBITDA margin compression (value accretive). However, if operational drift and slippage cause margins to slump (value destructive), this must be categorized as deleterious squeezing. In other words, there is a story to understand when EBITDA margins droop.

03 *ETA CEOs shine as buyers and sellers, and make less impact as operators*

ETA quarterbacks excel at buying companies at reasonable prices and convincing buyers to value their enterprises at attractive EBITDA trading multiples. This is where the majority of enterprise value is created. As operators, their scorecards are murkier and spottier. Yes, revenue and EBITDA dollars tend to increase, but they are associated with EBITDA margin degradation. Some of this decline is intentional, but we believe

some is not. All of this makes sense because many ETA stars are former investment bankers and private equity alumni whose core skills are deal-making rather than operations.

Whether ETA chiefs succeed through EBITDA multiple expansion, revenue growth, or EBITDA margin improvement does not really matter. There are no asterisks next to the IRR scorecard; a win is a win, regardless of how the finish line is crossed. However, since there is apparent reliance on EBITDA multiple arbitrage, if that becomes unsustainable at some point, the IRR outcomes in the game will likely tumble. To sustain IRRs, operational excellence will matter more and assume a larger share of the enterprise value attribution drama.

Conclusion

Quantitatively, enterprise value attribution can be divided into changes in EBITDA multiple and fluctuations in EBITDA dollars. EBITDA dollars can be further bifurcated into revenue and EBITDA margin modifications. In the ETA universe, EBITDA multiple expansion is the predominant driver of enterprise value multiplication. EBITDA margins rarely influence changes in EBITDA dollars, and sagging margins are not penalized in the exit valuation drill.

For our students and aspiring entrepreneurs, congratulations on your decision to explore or pursue a search fund adventure. We believe it is a terrific and bold choice that can be emotionally, intellectually, and financially rewarding. We applaud your optimism and pluck, and we encourage you to understand your pathways to creating enterprise and equity value, as well as IRR. The EBITDA multiple, revenue, and EBITDA margins are the levers you will play with; consider how you plan to employ them and what historical trends reveal about likely routes to triumph.

For investors and capital providers, we hope this note clarifies the key factors that influence enterprise value changes. This information should help you coach entrepreneurs and set realistic expectations about what CEOs should prioritize and which critical inputs drive value creation and IRR.

Regardless of how you choose to manipulate the toggles, we wish you fun and victory. We thoroughly enjoy watching your stories unfold and are rooting for you every step of the way!

Endnotes

[1] Daniel Lazier is a search fund entrepreneur and the founder of Skyline Crest Partners, a California-based search fund.

[2] Jacob Thomas is the Williams Brothers Professor of Accounting and Finance at the Yale School of Management.

[3] A. J. Wasserstein is the Eugene F. Williams, Jr., Senior Lecturer in the Practice of Management at the Yale School of Management.