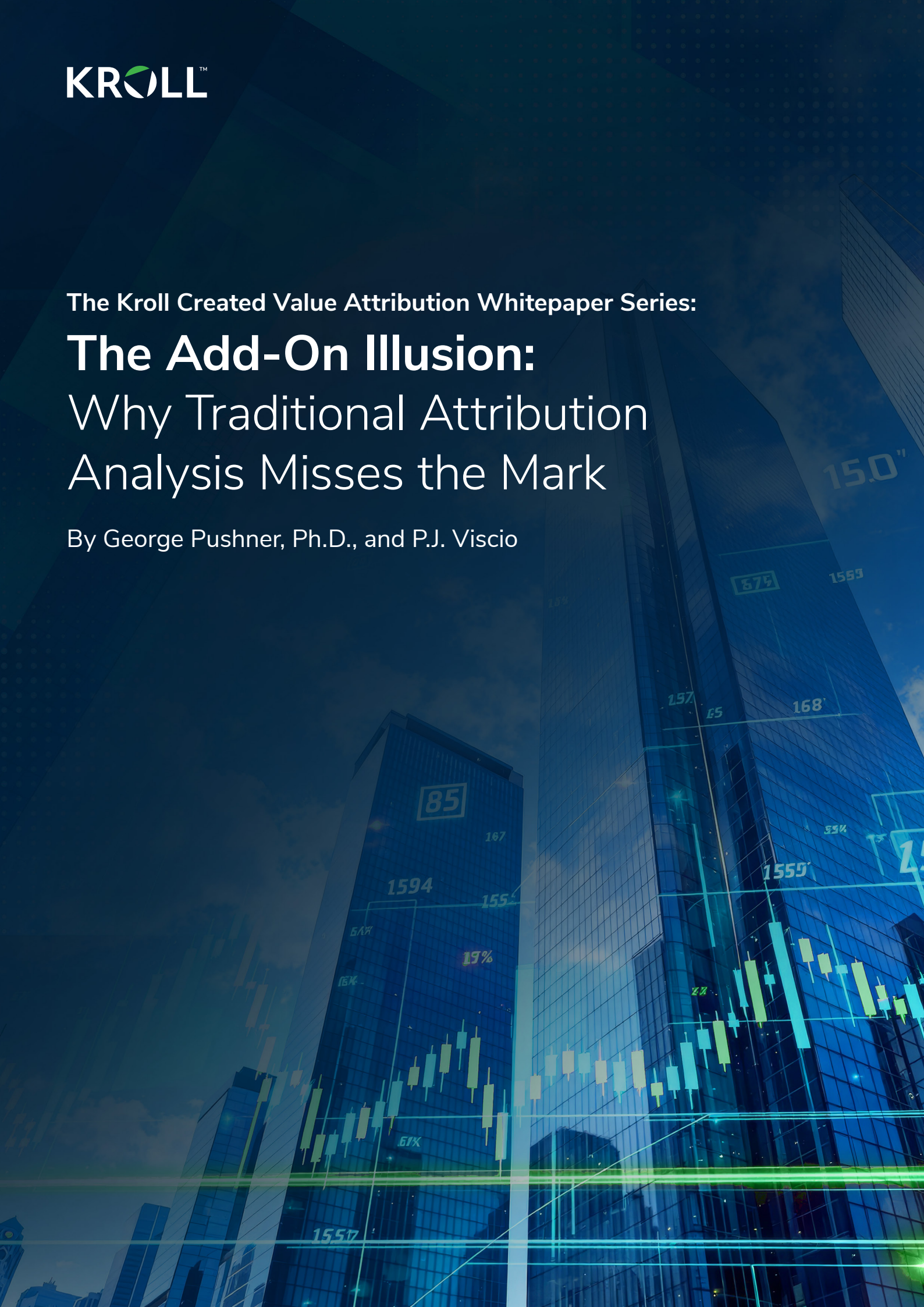


The Kroll Created Value Attribution Whitepaper Series:

The Add-On Illusion: Why Traditional Attribution Analysis Misses the Mark

By George Pushner, Ph.D., and P.J. Viscio



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In today's private equity environment, add-on acquisitions ("add-ons") have become more than tactical enhancements—they are often central to how value is built and scaled. As buy-and-build strategies become prevalent if not dominant, the line between acquired and created value is increasingly blurred. While top-line growth may appear robust, it often masks more nuanced questions: How much of that growth is organic? Have margins truly improved, or is it distorted by the integration of higher-margin targets? Without a clear method to isolate these effects, attribution analysis risks overstating value creation and understating the role of capital deployment. This paper introduces a structured approach for separating the purchased from the earned, enabling a more accurate assessment of true operational and strategic value-add.

In particular, we focus on how add-on acquisitions should be reflected in created value attribution (CVA) analysis. While EBITDA increases are generally viewed as positive, they often raise critical questions: How much of that growth is organic and how much stems from acquisition? And what is the alpha ("Alpha"), defined as organic value creation on an outperformance basis, after accounting for what is purchased?

If an add-on acquisition is purchased at fair value, there is probably no real value created at the time of acquisition.

Separating Organic Value Creation

A critical component of the attribution process is to segregate growth from add-on acquisitions where applicable. Though sometimes challenging, it is important to estimate organic value creation after adjusting for add-on acquisitions and divestitures. In most cases, add-on acquisitions are initially neutral in terms of value creation (the gains in revenue, margin and expected future growth are normally offset by the acquisition cost). But if not properly accounted for, the subsequent improvements, including "multiple arbitrage" and synergies beyond those reflected in the acquisition price, will not be properly reflected as organic value creation, and any estimation of Alpha will be biased or distorted.

But as the add-on is integrated and improved, and revenue, margin and other synergies are obtained, there is potential for significant value creation to occur. To measure this value creation, it is necessary to identify and isolate what was actually acquired at the time of the follow-on acquisition(s).

Attribution analysis addresses the critical question of how value is created and can ultimately help identify general partners (GPs) who provide sustainable value-add through "building better businesses." Unfortunately, the industry convention for value attribution provides a very narrow view of how value is created, as it is limited by a lack of quantification of industry performance and add-on acquisitions. The conventional framework does not measure Alpha and is therefore of limited value in identifying GPs who consistently provide operational and or strategic value-add.¹

A robust attribution analysis should seek to quantify Alpha value creation by measuring performance of the portfolio company relative to that of an appropriate industry benchmark, separating the impact of add-on acquisitions and isolating true deleveraging.² This paper addresses the challenges of adjusting for add-on acquisitions in order to separate organic value creation.

The Kroll Created Value Attribution (CVA) Framework (formerly known as The Duff & Phelps CVA Framework and also known as the Viscio-Pushner Model) addresses the "bought vs. built" question through an extension of our fundamental value driver analysis. We begin with the historical approach to value attribution and add a process we call primary deconstruction, which separates revenue and margin impacts, cost of capital and expected future growth impacts, and the various potential balance sheet impacts. We then add benchmarking at the portfolio company level, which identifies company-specific outperformance of the factors above. Finally, we isolate the impact of add-ons or divestitures on each of the impacts to identify organic company-specific outperformance or Alpha.

¹ See *Measuring Alpha for Private Equity*, the second paper in the Duff & Phelps Created Value Attribution Whitepaper Series.

² See *Solutions to the Challenge of Measuring Organic Deleveraging in Created Value Attribution Analysis*, the first paper in the Duff & Phelps Created Value Attribution Whitepaper Series.

Figure 1 illustrates the main components of the enterprise-level value creation of our CVA Framework. The isolation of the organic Alpha impacts is highlighted in the blue box.

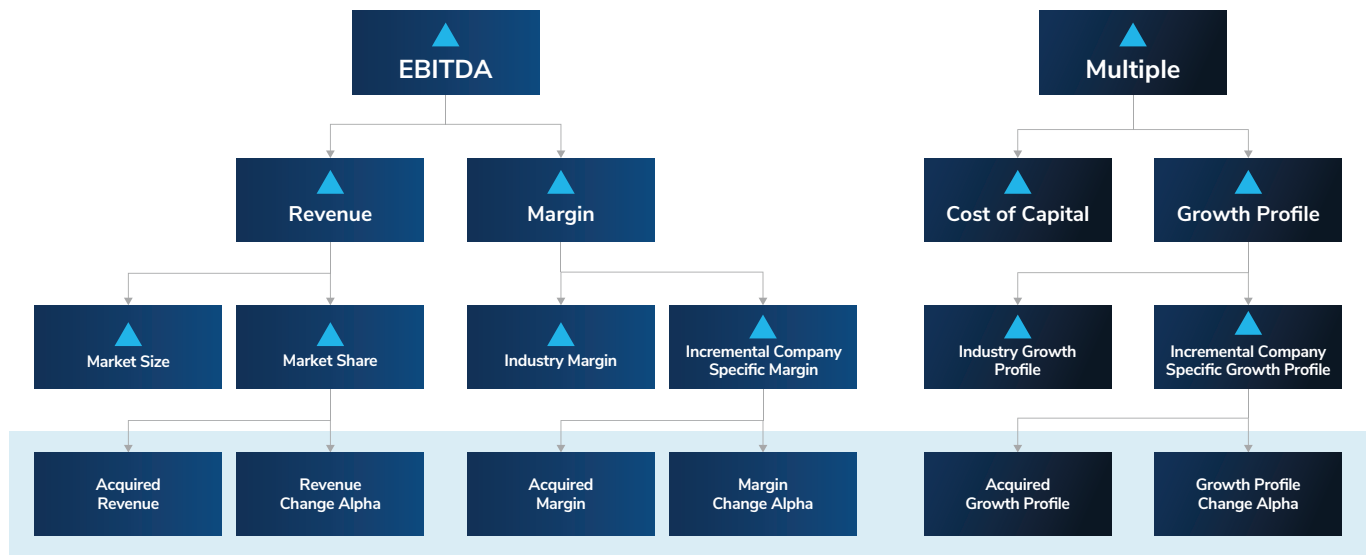


Figure 1: CVA Framework with Primary Deconstruction, Benchmarking, and Isolation and Segregation of Acquisition-Related Impacts

The last row, the final step, uses an algorithm that identifies how much revenue (“Acquired Revenue”), margin (“Acquired Margin”) and expected growth (“Acquired Growth Profile”) were acquired via add-ons for each material acquisition (or divestiture). Using the portfolio company’s valuation metrics as of the date of the add-on acquisition as benchmarks, the initial value impacts for each acquisition can be identified and segregated. We can then represent any subsequent or post-acquisition growth and improvement of the combined entity as true organic value creation. We label this residual organic company-specific value creation as:

- Revenue Change Alpha
- Margin Change Alpha
- Growth Profile Change Alpha

To help understand the importance of segregating add-on impacts, consider the add-on acquisition of a company with lower margins than the platform company. A GP may seek to acquire targets with a lower margin than the platform company and then, through any number of initiatives, seek to bring the margins of the acquired businesses more in line with that of the platform company. Value is not likely to be created at the time of each follow-on acquisition; rather, it is created if the margins of the add-on move toward that of the platform company.

For the acquisition of a business with a margin less than that of the platform, while the Acquired Revenue would be reflected as positive value purchased, the margin impact would reflect an offset to purchased value within the Framework. While this may not necessarily appear

intuitive, without representing lower margin of the acquired business as an offset, the lower margin would skew any actual organic change in margin and would therefore serve to understate or even obscure any real improvement in margin. Without separating the acquisition impacts it might appear that there is weak or even negative margin growth, but the true value creation is revealed if we fully reflect the lower margins of the added business.

Conversely, if the add-on has margins above the platform company, the margin impact is positive. The combined business should have higher margins than the platform alone, but this is simply mathematics and not the result of margin improvement. Here we need to separate the positive improvement from the add-on to accurately determine the margin change Alpha.

Similarly, consider potential value created under “multiple arbitrage” strategies, where the add-on business is purchased for a significantly lower multiple than that of the platform company. There is likely to be a good reason or reasons for the lower multiple, such as lower expected growth, and the expected growth of the add-on does not magically increase after it is acquired (in fact, the expected growth for the combined entity should be lower than it was for the platform company alone). Thus the Acquired Growth Profile would be negative. If and when the add-on is integrated and improved and its growth prospects move toward those of the platform company, we then give the company credit for organic value creation in the form of Growth Profile Change Alpha.

Once the immediate value change impacts attributable to acquisitions are quantified, the true amounts of organic value change or created value can be readily determined. We are simply “moving the goalposts” for what is purchased, and any subsequent value created through successful acquisitions (e.g., post-acquisition growth, realization of synergies or other increases in the value of the combined entity after acquisition) is reflected as organic value creation (and part of Alpha).

Lastly, we also need to adjust the analysis of balance sheet impacts to reflect the cost of the add-ons. Regardless of whether the add-on is financed with debt, new equity or cash on hand, net debt will effectively rise by the cost of

the add-on, distorting the apparent change in net debt. If one fails to separate the debt, equity or cash used to finance an acquisition, one may grossly understate true organic deleveraging by simply looking at the change in net debt.

If there are any divestitures from the platform company, the process is simply reversed. We subtract the revenue impact from the revenue that goes away and adjust for the lost margins and expected growth of the divested entity. The proceeds of the divestiture are added to the change in net debt, as the apparent deleveraging is otherwise overstated (if deleveraging is positive) by such proceeds.

An Illustrative Example

Figure 2 shows an example of the results of our CVA Framework with the isolation of acquisition-related impacts.

Value Driver

(in millions)

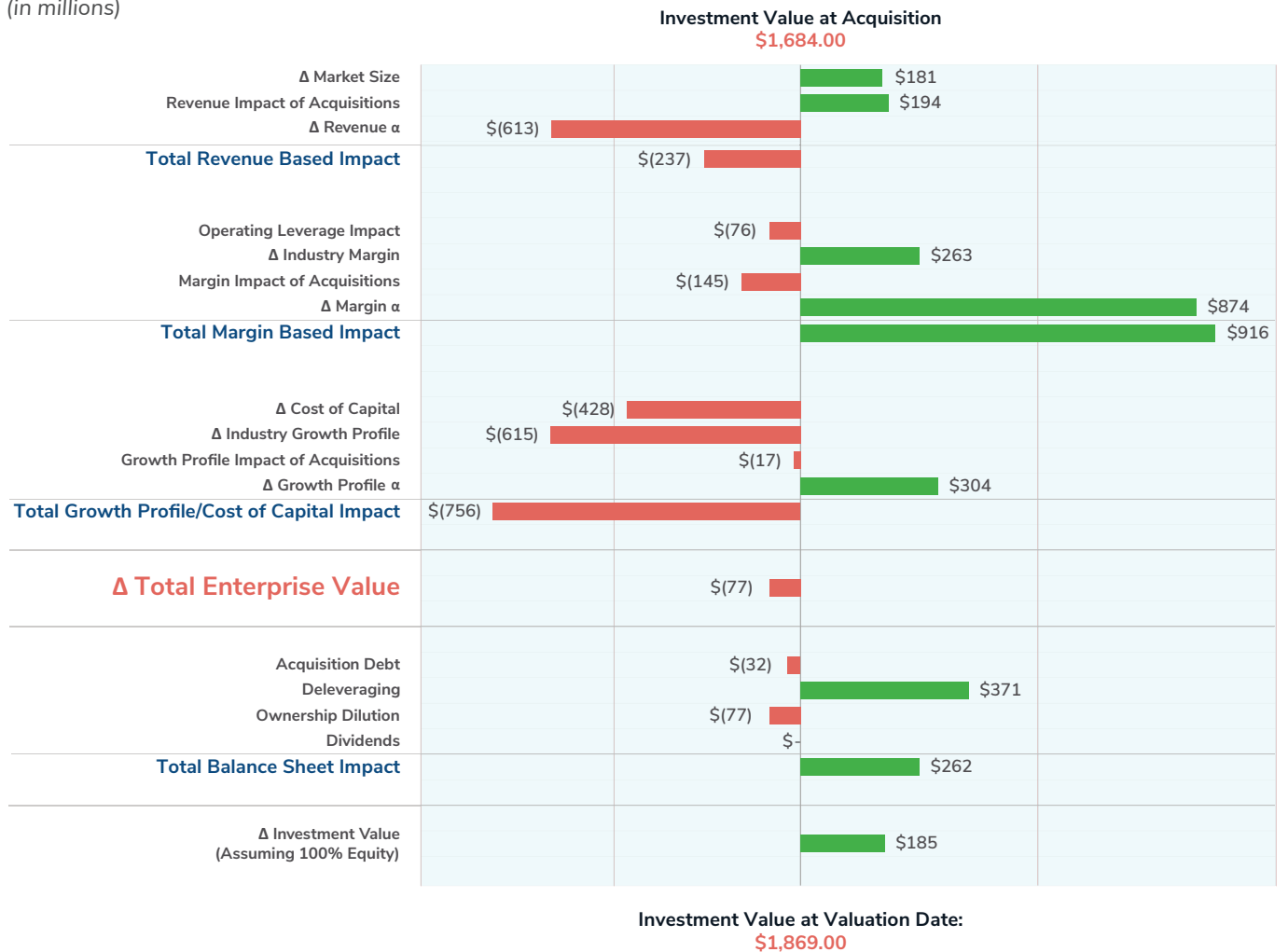


Figure 2: Illustrative Example: Attribution Analysis Based on Primary Deconstruction, Integration of Performance Benchmarking, and Isolation and Segregation of Acquisition-Related Impacts

As seen in Figure 2, the separation of acquisition impacts reveals an even more granular level of detail. While industry revenue growth (market size) impacts and add-on acquisitions increased enterprise value on the top two lines, this was offset by large negative revenue Alpha (or loss of market share). But (organic) margin Alpha, after reflecting lower margin add-ons, was very positive. The value created from margin improvement outperformance is

more pronounced than a more basic analysis would indicate because the acquisition of a lower margin business had obscured some of the margin improvement. Similar refinement can also be observed in terms of growth profile (reflecting expected future growth), reflected by a higher growth-profile Alpha relative to the negative industry growth profile impact.

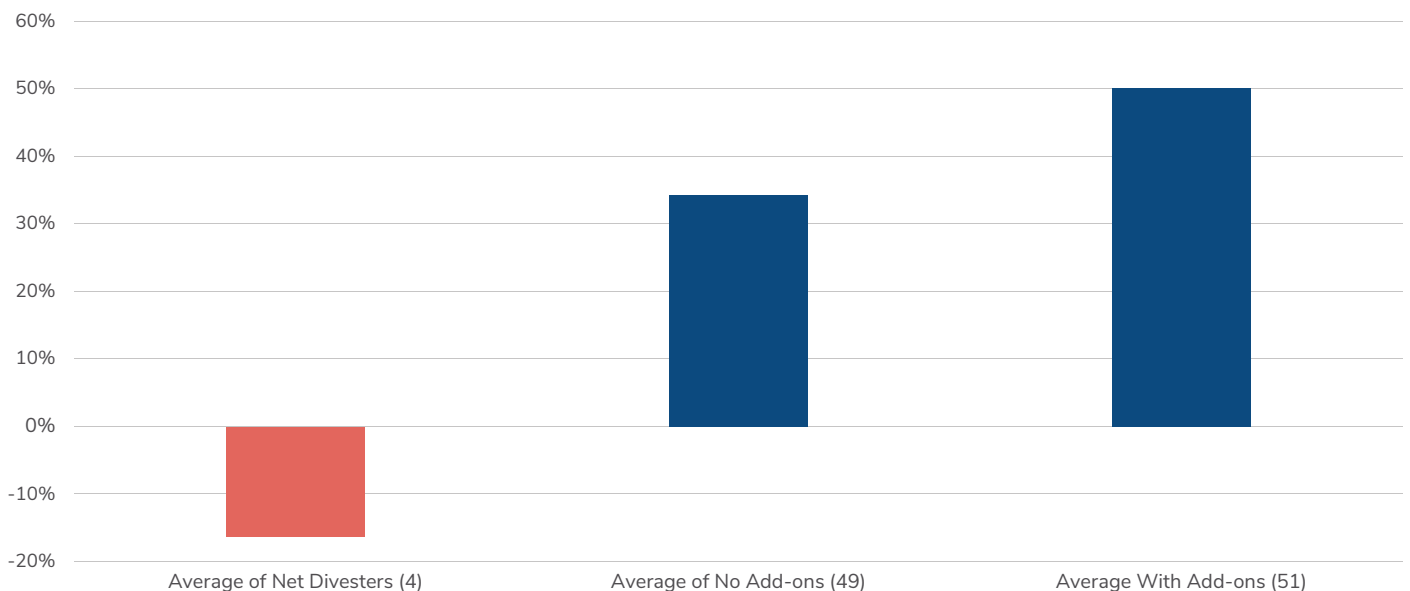
Observations of Potential Impacts of Add-On Acquisition

Examining the 104 CVA studies we have completed to date,³ we note some interesting observations and patterns regarding value creation and the extent of add-ons. Observations were categorized based on the size (aggregate total enterprise value [TEV] at acquisition dates) of the add-ons relative to the platform TEV at acquisition.

Forty-nine investments had no add-on activity, four investments had negative net add-ons (i.e., positive proceeds from divestitures less add-ons), and 51 had positive net add-ons. For these groupings, the average Alpha (as a percentage of total value creation) is as follows:

Alpha Value Creation as Percentage of Total Value Creation

Grouped by Presence of Add-ons



Thus, it appears that for our sample, the investments with add-ons showed higher Alpha than the investments with no add-ons.

Further breaking down the group with add-ons, we observed that 17 investments had total add-ons with enterprise value less than 20% of total platform enterprise value at the purchase date of the platform. Twelve investments added companies representing between 20%

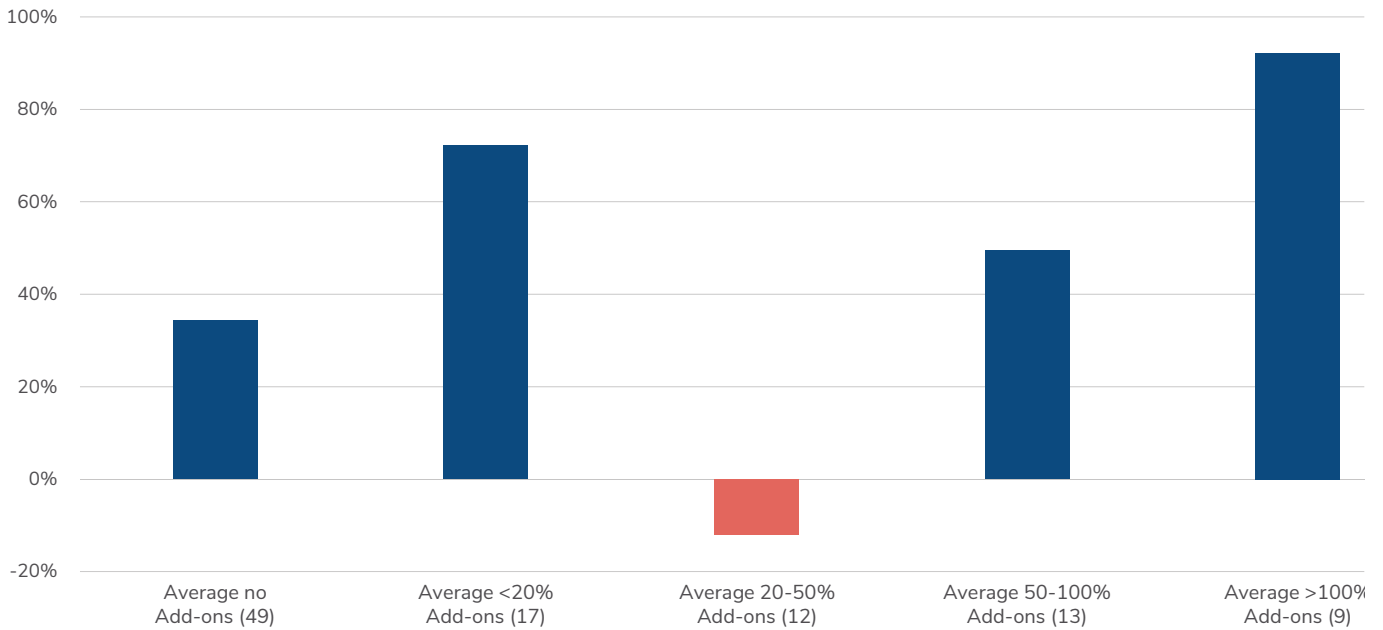
and 50% of total platform TEV, and another 13 investments added companies representing between 50% and 100% of total platform TEV. This leaves nine investments that showed very large add-ons, with the acquired TEVs representing more than 100% of platform TEV.

We then look at the extent of Alpha value creation within the groupings above:

³ We excluded one study where there was an extreme outlier that materially distorted the average results.

Alpha Value Creation as Percentage of Total Value Creation

Grouped by Aggregate Relative Size of Add-ons



We find the greatest Alpha value creation for investments with modest levels of add-ons (less than 20% of initial TEV) and for investments with high levels of add-ons (greater than 100% of initial TEV). For investments with moderate levels of add-ons (20% to 50% of initial TEV), the average Alpha value creation is negative. But looking further within the latter group, we find three investments with large negative Alpha and the remaining nine showing Alpha well above the group with no add-ons.

Thus, both low and high levels of add-ons appear generally associated with increased operational or strategic value add, although there are some observations in the middle range

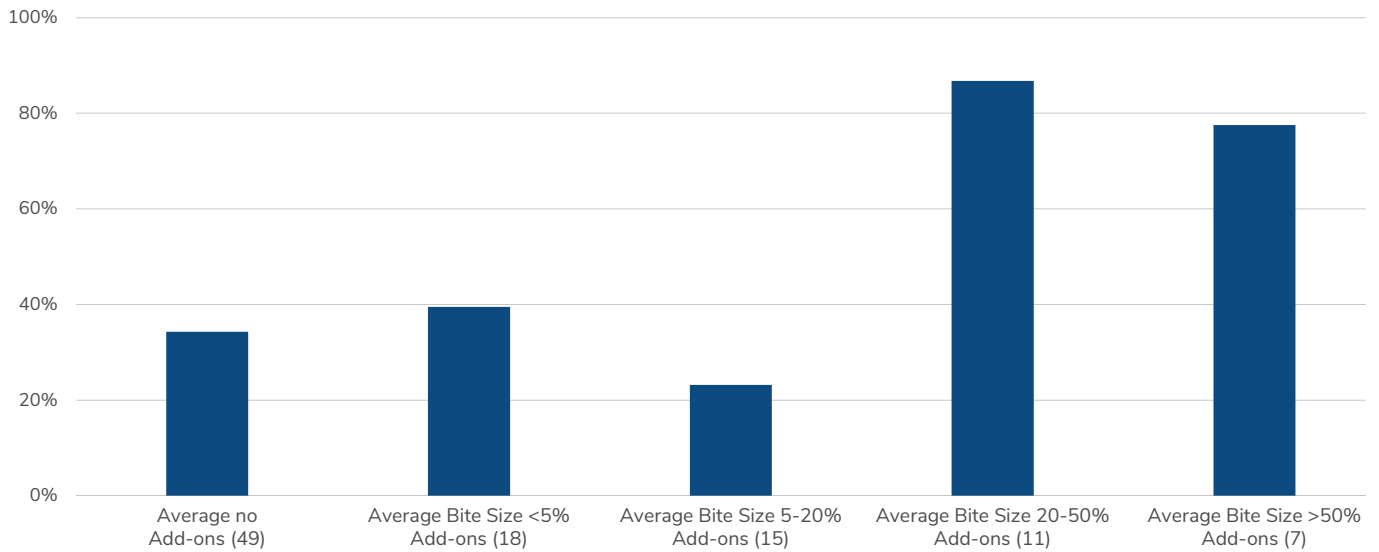
which indicate negative Alpha. The cause is certainly not clear from this limited sample, but we believe that add-ons can increase risk for the platform company, and the results are frequently binary. In most cases, Alpha increases, but there are also examples of significant underperformance.

We also did a breakout of the same Alpha value creation based on the average or “bite size” of the add-ons completed (e.g., if the platform did three add-ons, each of which represented 10% of initial platform TEV, they would be in the 20%–50% category above but would be in the 5%–20% category below).



Alpha Value Creation as Percentage of Total Value Creation

Grouped by Relative Bite Size of Add-Ons



Here we find that small bite-size add-ons are associated with some modest additional Alpha value creation, and that large bite-size add-ons often result in significant outperformance. We believe that the former is consistent with the purchase of small companies (often mom-and-pop businesses) based on their revenue or customer value and reflecting subsequent cost reductions, risk reduction (reflected in “multiple arbitrage”) and, perhaps, some improvements in pricing as they are integrated onto the platform. With respect to the largest bites (more than 20% of platform TEV), the add-ons appear much more likely to result in major and possibly transformative Alpha value creation.

With respect to the middle group of moderate-sized bites, this group underperforms all other groups, including the group with no add-ons. Within this group there is a wide dispersion of results, however, and one instance with a

Conclusion

Created value attribution is certainly complicated by add-on acquisitions, but a careful and methodical breakdown of the value impacts of each add-on can identify true organic value creation and is a critical component of the measurement of Alpha. An add-on has definite impacts on revenue growth, margins, future growth prospects and net debt, and by adjusting for these “purchased” impacts we can move the goalposts to properly measure organic value creation and Alpha.

significant negative Alpha. The reasons for this we can only speculate. The below-average Alpha value creation could reflect the common challenges associated with add-ons. It may be that add-ons in this relative size range are more challenging to integrate than mom-and-pops. Add-ons of this size also have a lower level of institutionalization compared to larger add-ons and offer more limited opportunities for strategic value creation through synergies than those larger acquisitions. While the causative factors underlying this relative underperformance for this size group are unknown at this time, we believe that this observation is nevertheless highly suggestive.

While we caution the reader from drawing definitive conclusions based on the limited data presented, we believe that the variation in results across our studies suggests that add-on acquisitions have diverse impacts on value creation based on relative size and we encourage additional studies.

The result of our 104 CVA studies to date suggests that add-ons can have diverse impacts on value creation, especially due to bite size of the add-on and the total value of add-ons. We look forward to conducting additional studies using the Kroll CVA Framework, and we encourage others to carefully examine this topic in greater depth.

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