

Solutions to the Challenge of Measuring Organic Deleveraging in Created Value Attribution Analysis

THE DUFF & PHELPS CREATED VALUE AT TRIBUTION WHITEPAPER SERIES FIRST IN A SERIES | BY GEORGE PUSHNER, PH.D., AND P. J. VISCIO





Created Value Attribution analysis addresses the critical question of how value is created and can ultimately assist LPs in the identification and selection of GPs who have demonstrated the ability to provide sustainable value-add through "building better businesses." Unfortunately, the historical approach to value attribution, which considers changes in EBITDA, market multiples and net debt, provides a very opaque view of how value is created; it addresses neither enterprise performance relative to the respective industry nor the distinction between organic value creation and acquired value. Created value attribution should seek to identify "Alpha," which we define as organic value creation on a company-specific outperformance basis relative to an appropriate industry benchmark. Additionally, assessing Alpha requires the consideration and quantification of a number of specific balance sheet impacts rather than just a simple calculation of the change in net debt.

In the estimation of value creation attributable to deleveraging, as described herein, rather than the simple change in net debt, all balance sheet and capital structure changes impacting net debt should be taken into account. Ultimately, deleveraging should represent investment-level, balancesheet-manifested value creation, in contrast to components of net debt changes that are "transactional" in nature and do not contribute to, nor detract from, value creation. This paper addresses those non-value-creating balance sheet impacts that need to be identified and quantified to arrive at value created through deleveraging.

Understanding Deleveraging Versus Changes in Net Debt

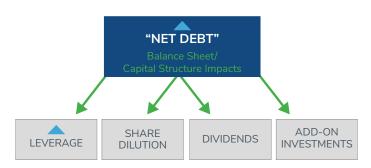
Deleveraging is a very important source of returns in private equity. It is a function of cash flow generation during the investment period, and it is manifest through a reduction in debt, an increase in cash balances or some combination thereof.

The performance of the portfolio company in the relevant time period is essentially the determining factor in deleveraging and may take different paths between the dates that created value is being measured and attributed. Deleveraging is generally driven by operating cash flows, and it often simply represents the reduction of debt and/or buildup of cash due to cash from operations. Contributions to deleveraging may also include more efficient use of working capital and other asset utilization efficiencies, as well as the sale of assets (including liquidations).

Also note that value creation is primarily impacted by absolute deleveraging (a reduction in the level of net debt rather than a change in net debt relative to some measure like EBITDA). Relative deleveraging or financial engineering can enhance operating cash flows and also impact risk, but it generally does not inherently drive deleveraging or value creation at the enterprise level. And while add-on acquisitions, whether financed with debt or balance sheet cash, do impact net debt, they do not impact deleveraging as defined herein. Additionally, the correct calculation of deleveraging must be net of the financing of add-on acquisitions.

Changes in the balance sheet and net debt derive from a number of factors. Some of these reflect deleveraging and others do not, and they may even hide or distort apparent deleveraging.

Figure 1: Breakdown of Potential Balance Sheet and Capital Structure Impacts



Deleveraging should represent investment-level value creation, such as a paydown of debt through cash flow from operations, in contrast to components of net debt changes that are "transactional" in nature and do not contribute to value creation. For example, a transactional change such as a leveraged recapitalization, where additional debt is offset by a cash dividend, does not represent deleveraging, as described herein, or value creation. Such changes merely move cash from one "location" to another.

Measuring "True" Deleveraging

Simplistically looking at changes in net debt can mislead investors using the historical framework. We note that several factors other than the paydown of debt through cash flow from operations may impact the change in net debt and therefore must be reflected appropriately in any attribution analysis.

As discussed, the primary driver of value creation from net debt changes in leveraged buyout investments is usually organic and absolute deleveraging in the form of a paydown of debt and/or the accumulation of cash. This deleveraging is a function of operational cash flow and investments in fixed and working capital over the interim investment period, and it has a direct contribution to value creation.

Other components that factor into the change in net debt may include acquisition funding, dividends and additional debt and equity financings. Given the variety of balance sheet changes that can occur, there is not always a direct impact on value creation as these changes can offset each other. For example, the new



issuance of equity, representing a "capital infusion" (i.e., as a necessary result of negative operational cash flow), would initially result in a decrease in net debt stemming from the cash proceeds from new equity. While this does reduce leverage, it would have no direct effect on value creation as the increase in cash would equal the increase in equity. But the change in net debt must be adjusted for the equity investment to determine created value attributable to deleveraging. Likewise, a dividend reduces cash and increases net debt by the amount of the dividend. Again, the change in net debt must be adjusted as a result of the dividend.

If balance-sheet cash is used to retire debt, this will reduce relative leverage (e.g. in terms of EBITDA interest coverage), but it does not represent value creation through deleveraging. If cash is deployed or invested in capital expenditures, net debt would then increase. However, we would still normally see no direct impact on value at the time of deployment or investment. While these examples would technically result in a change in leverage, we consider them to be inorganic (i.e., transactional) in nature as they are not derived from operational cash flow and do not result in immediate value creation at the investment level.

Another important example is where additional debt is issued to finance an add-on acquisition. In that case, cash is exchanged for EBITDA and expected growth. While the new debt in this case does impact leverage and the change in net debt, it should have no impact on actual deleveraging, as described herein. But if one fails to separate the debt or cash used to finance an acquisition, one may grossly understate true organic deleveraging by simply looking at the change in net debt.

To help illustrate these important distinctions in balance sheet impacts, let's look at the example in Figure 2.

Figure 2 : Sample Calculation of change in Net Nebt and Deleveraging

Total Debt at Acquisition	1,000
Cash at Acquistion	100
Net Debt at Acquisition	900
Total Debt at Exit	1,300
Cash at Exit	150
Net Debt at Exit	1,150
Debt Required to Fund Add-On	200
Dividends	150
Change in Net Debt	(250)
True Organic Deleveraging	100

In this example, it appears, based on the simple change in net debt over the investment period, that net debt increased by \$250, implying a reduction in value. But after we remove the \$200 that funded the add-on and add back the \$150 paid in dividends, we find that there was an organic change in net debt of \$100, resulting in value creation through deleveraging.

Another potential balance-sheet impact is through the issuance of incentive shares or options to management. This results in dilution similar to that of an equity offering, but instead of providing cash to the portfolio company, it is instead expected to provide motivation for management to create value for shareholders. The positive impact of these incentive shares (if any) should be captured within the enterprise-level value creation of the subject company, but the proceeds to management from such incentive shares have a negative impact on the balance sheet and should be captured separately and appropriately. In a proper attribution analysis, it should be measured as an offset to Alpha value creation, representing a cost of generating Alpha.

Conclusions

Deleveraging is an important source of value creation. However, quantifying organic deleveraging may not be straightforward given additional equity investments, dividends, add-ons and divestitures. Based on our experience, deleveraging nearly always differs from the change in net debt. As a result, adjustments are required to estimate true organic deleveraging. In calculating deleveraging, one should proceed with caution, and investors should be skeptical of attribution analysis that doesn't properly reflect the necessary adjustments as discussed herein.

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