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Enterprise Value Adjustment Multiple Daniel R. Van Vleet, ASA

I recently presented a webinar with Business Valuation Resources (BVR) that addressed the valuation implications of the Tax Cuts and Jobs Act of 2018 (the "Act"). In that webinar, I presented a means to adjust enterprise values that were calculated using pre-Act M&A multiples that do not reflect the tax characteristics of the Act. The information contained in this article is based on the information provided in the BVR webinar.

This paper addresses the concept that a pre-Act M&A transaction would not reflect changes in the cost of capital and corporate tax rates attributable to the Act. Consequently, an adjustment is appropriate when a pre-Act M&A multiple is used to value a subject company as of a post-Act valuation date. I refer to this adjustment as the Enterprise Value Adjustment Multiple (EVAM).

There are a few caveats regarding the use of the EVAM. The EVAM only corrects for the change in the cost of capital and tax rates between the pre-Act M&A transaction date and the post-Act valuation date. There may be other issues that impact the purchase price and structuring of corporate transactions that are as important, or more important, than the WACC or tax attributes of the Act. In addition, the condition of the capital markets and various micro- and macro-economic characteristics may have a substantial impact on the value of a target company involved in a pre-Act M&A transaction when compared to a post-Act valuation analysis of a subject company.

Having said all this, the reduction of the corporate tax rate provided in the Act will likely impact the cost of capital and enterprise values of many companies in the post-Act environment. Therefore, it is important to consider a value adjustment when using pre-Act M&A multiples to value a subject company with a post-Act valuation date. The EVAM provides a means to make this adjustment.

ENTERPRISE VALUE ADJUSTMENT MULTIPLE

The following procedures are based on the example provided in the BVR webinar. The four steps used to calculate and apply the EVAM are as follows:

<u>Step 1:</u> Calculate the relevant 2016 M&A multiple. In Table 1, I used an enterprise value of \$1,580,000 and an EBITDA of \$300,000. The resulting 2016 M&A multiple is 5.27.

Table 1

	Target
2016 Transaction	Company
(1) Enterprise Value (2) EBITDA	\$1,580,000 \$300,000
(3) 2016 EBITDA Multiple	5.27

<u>Step 2:</u> Calculate the weighted average cost of capital (WACC) and corporate tax rates applicable to the subject company as of the 2016 M&A transaction date and the 2018 valuation date. The following Table 2 provides an illustration of these calculations.

Table 2

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	2016	2018
	M&A	Valuation
Weighted Average Cost of Capital	Date	Date
(1) Equity Rate	10.00%	10.00%
(2) Debt Rate	4.00%	4.00%
(3) Tax Deduction @ 40% & 25%	-1.60%	-1.00%
(4) Tax Affected Debt Rate	2.40%	3.00%
(5) Capital Structure - Debt	31.65%	27.03%
(6) Capital Structure - Equity	68.35%	72.97%
(7) WACC	7.59%	8.11%
(8) Long-term Growth	0.00%	0.00%
(9) WACC Capitalization Factor	7.59%	8.11%
(10) 2016 Tax Rate	40%	
(11) 2018 Tax Rate	25%	

The change in capital structure between 2016 and 2018 as presented on Lines 5 and 6 of Table 2 is attributable to an iterative capital structure analysis conducted using a single period capitalization (SPC) method. This was done to ensure that conceptual changes in capital structure and tax rates would result in identical indications of value provided by the SPC method and the EVAM adjusted M&A method. The reader should be aware that an iterative capital structure analysis is not necessary when using the EVAM. Other methods to estimate the appropriate capital structure in the WACC calculation may be used.

Step 3: Use the following formula to calculate the EVAM.

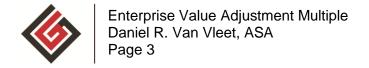
Enterprise Value Adjustment Multiple

(1 – Post TCJA Tax Rate)	Pre TCJA WACC
(1 - Pre TCJA Tax Rate)	Post TCJA WACC

In this example we calculated the EVAM at 1.1709 using the following components:

- 2018 Tax Rate 25%
- 2016 Tax Rate 40%
- 2018 WACC 8.11%
- 2016 WACC 7.59%

Step 4: Apply the EVAM to the 2016 enterprise value of the subject company to conclude a 2018 enterprise value. Subtract subject company debt from the 2018 enterprise value to quantify the value of equity, if desirable.



The following Table 3 illustrates these calculations.

Table 3

		2018
Subject Company	V	aluation
(1) 2018 EBITDA	\$	300,000
(2) 2016 EBITDA Multiple		5.27
(3) 2016 Enterprise Value	1	,580,000
(4) Enterprise Value Adjustment Multiple (EVAM)		1.1709
(5) 2018 Adjusted Enterprise Value (Rounded)	1	,850,000
(6) Debt		(500,000)
(7) 2018 Adjusted Equity Value	\$ 1	,350,000

The following Table 4 illustrates the indications of value provided by the SPC method used in the BVR webinar and the analysis described in this paper.

Table 4

	2016	2018
2018 Projected Income Statement	Valuation	Valuation
(1) Debt Free Cash Flow	120,000	150,000
(2) WACC Capitalization Factor	7.59%	8.11%
(3) Enterprise Value (Rounded)	1,580,000	1,850,000
(4) Debt	(500,000)	(500,000)
(5) Equity Value	\$1,080,000	\$1,350,000

SUMMARY

The EVAM may be used to adjust the enterprise value of a subject company when M&A multiples derived from pre-Act M&A transactions are used in the analysis. The EVAM should be considered when an argument can be made that the M&A multiples used in the analysis do not reflect the characteristics of the Act and the relevant valuation date occurs at a time when the characteristics of the Act were known or knowable with some degree of certainty.

The EVAM only corrects for the change in the cost of capital and tax rates between the M&A transaction date and the valuation date. Other Act-related issues such as bonus depreciation and business interest expense limitation should be separately considered and analyzed. Other conditions that may affect the analysis such as micro- and macro-economic characteristics may have a substantial impact on the value of a target company involved in a 2016 transaction when compared to a 2018 valuation analysis of a subject company.

William P. McInerney and I authored an article that was published in the Spring 2018 edition of the *Business Valuation Review* publication of the American Society of Appraisers. The article goes into the various characteristics of the Act and how to make appropriate adjustments to a business valuation in this new tax environment. Click here to read further.