

Oil & Gas Modeling

– Certification Quiz Questions

Module 3 – Midstream 3-Statement Model and Valuation

10. You are building a 3-statement model for a Midstream company structured as a Master Limited Partnership (MLP). The MLP's Limited Partners own 98% of the common units, and its General Partners own 2%; the MLP also owns stakes in various other assets.

In your initial model, you have projected the LP Distributions based on a percentage of the Net Income Attributable to the Limited Partners, under the logic that the company's revenue, expenses, and capital structure are relatively predictable/stable over time, so the historical Payout Ratio should be accurate in the forecasts.

However, your co-worker reviews your model and says this is incorrect and that you should forecast the LP Distributions based on the company's Distributable Cash Flow (DCF) and targeted Distribution Coverage Ratio (DCR) instead.

In which of the following scenarios would this new projection method make the **GREATEST** difference? Your answer must be plausible in terms of both arithmetic and the legal/corporate structure of the company.

- a. The Interest Rate on the company's Debt increases substantially, so the higher Interest Expense reduces the cash flow it can distribute to its LPs.
- b. The MLP's Tax Rate increases, which reduces the cash flow it can distribute to its LPs.
- c. The MLP's GPs receive Incentive Distribution Rights (IDRs) that increase their percentage of the total Distributions to more than 2% (i.e., Distributions are no longer proportional to common unit ownership).
- d. The MLP's Maintenance CapEx requirements increase, reducing the cash flow it can distribute to its LPs.

11. You are valuing a U.S.-based Midstream company structured as an MLP. Your initial set of comparable companies included only other Midstream MLPs, but a senior banker on your team wants to change the set to include both MLPs and traditional C-Corporations.

If you make this change, what is the most appropriate valuation multiple to use for comparison purposes in your set?

- a. Enterprise Value / Revenue.
- b. Enterprise Value / EBITDA.
- c. Equity Value / LP Distributable Cash Flow (P / DCF).
- d. LP Distribution Yield.
- e. Equity Value / LP Net Income (P / E).

12. In your set of comparable public companies for the Midstream valuation you are working on, you have found the “EBITDA to Distributable Cash Flow” bridge for Plains All American [PAA], a U.S.-based firm structured as an MLP.

A screenshot of the company’s internal calculations to calculate its LP Distributable Cash Flow is shown below this question.

Which of the following **CHANGES** would you make to this calculation to align the company’s LP DCF more closely with the comparability standards used in this course?

This question has **2 correct answers** and 3 incorrect answers. You must select **BOTH** correct answers and no incorrect answers to earn a point for this question.

Adjusted EBITDA ⁽⁶⁾	\$ 3,326	\$ 3,167
Adjusted EBITDA attributable to noncontrolling interests ⁽⁷⁾	(547)	(456)
Adjusted EBITDA attributable to PAA	<u>\$ 2,779</u>	<u>\$ 2,711</u>

	Year Ended December 31,	
	2024	2023
Adjusted EBITDA ^{(6) (8)}	\$ 3,326	\$ 3,167
Interest expense, net of certain non-cash and other items ⁽⁹⁾	(365)	(367)
Maintenance capital ⁽¹⁰⁾	(261)	(231)
Investment capital of noncontrolling interests ⁽¹¹⁾	(86)	(87)
Current income tax expense	(195)	(145)
Distributions from unconsolidated entities in excess of/(less than) adjusted equity earnings ⁽¹²⁾	11	(37)
Distributions to noncontrolling interests ⁽¹³⁾	(425)	(333)
Implied DCF	\$ 2,005	\$ 1,967
Preferred unit cash distributions ⁽¹³⁾	(254)	(241)
Implied DCF Available to Common Unitholders	<u>\$ 1,751</u>	<u>\$ 1,726</u>
Common unit cash distributions ⁽¹³⁾	(891)	(748)
Implied DCF Excess ⁽¹⁴⁾	<u>\$ 860</u>	<u>\$ 978</u>

- Potentially add the Distributions from Equity Investments rather than just the Distributions in Excess of the Adjusted Equity Earnings.
- Remove the “Distributions to Noncontrolling Interests” since the Adjusted EBITDA starting figure is before the deduction for NCI-Attributable EBITDA.
- If necessary, adjust the Interest Expense and Current Income Tax Expense for the non-cash portions so that only the Cash Interest and Cash Taxes are deducted.
- Instead of using the company-provided “Maintenance Capital” figure, deduct its Total CapEx times the percentage typically represented by Maintenance CapEx based on a review of the comparable companies.
- Use the “Adjusted EBITDA Attributable to PAA” of \$2,779 rather than the Total Adjusted EBITDA of \$3,326 as the starting point in this bridge.

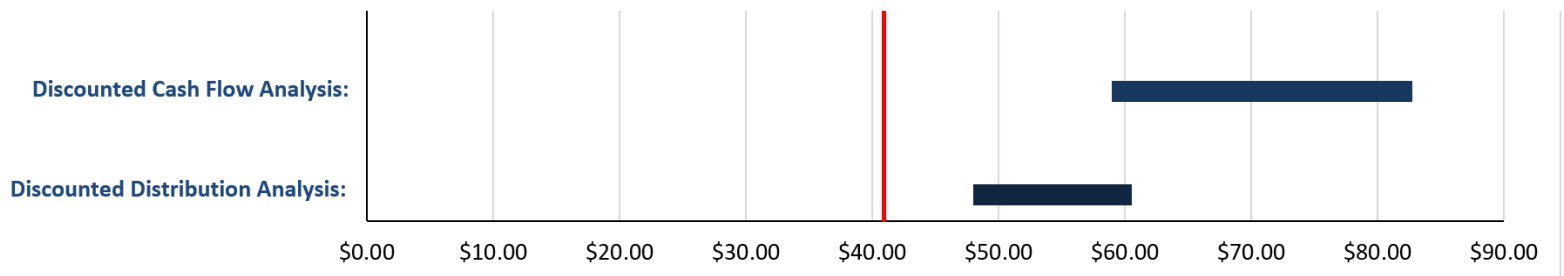
13. You have valued a Midstream MLP company using both a traditional Discounted Cash Flow (DCF) Analysis based on Unlevered Free Cash Flow and a Discounted Distribution Analysis (DDA).

The Distributions in the DDA are based on the company's Distributable Cash Flow and its targeted Distribution Coverage Ratio, which is currently set to 2.0x.

These two analyses produce very different ranges for the company's implied value, even though they are based on the same 3-statement model over the first 5 projected years. After these first 5 years, summary projections based on simple growth rate and margin percentages are used.

An image from a portion of the valuation summary is shown below this question.

What is the **MOST LIKELY** explanation for this divergence between these two valuation methodologies?



- The company spends a significant amount on Growth CapEx, but that spending and the additional growth from it are reflected only in the DCF since the DDA is based on Distributable Cash Flow rather than Unlevered Free Cash Flow.
- The Cash Tax number is likely quite different in the DDA since the interest "tax shield" factors into the analysis; the Unlevered DCF ignores this tax shield since it is capital structure-neutral.
- The company's capital structure might change significantly (e.g., it shifts to a higher Equity percentage), affecting the DDA more strongly than the Unlevered DCF.
- The company's Change in Working Capital could be significant, which matters since the Change in WC is a component of Unlevered FCF but not Distributable Cash Flow.
- The assumptions in the last 5 years of the 10-year forecasts for each methodology might diverge significantly, resulting in very different Terminal Values and implied share prices.