MONTANA Department of REVENUE

2021 Capitalization Rate Study Pipelines - Gas

FINAL

Completed: April 16, 2021

Yield Capitalization Rate Conclusion Industry: Pipelines - Gas 2021 Assessment Year

Capital Structure [1] Equity Debt	50.00% 50.00%	
Equity Cost of Capital Capital Asset Pricing Model - Ex Post [2] Capital Asset Pricing Model - Ex Ante [2] 3 Stage Dividend Discount Model - Dividends [3] 3 Stage Dividend Discount Model - Earnings [3] Weighted Average Selected Cost of Equity	11.96% 9.64% 22.30% 15.90% 13.29%	Weighting 35% 35% 15% 15% 100%
Debt Cost of Capital A - Mergent's - Avg. YTM of A Rated Corporate Bonds [4] Baa - Mergent's - Avg. YTM of Baa Rated Corporate Bonds [4] Ba - MTDOR - Avg. YTM of Ba Rated Corporate Bonds [5] Weighted Average Selected Cost of Debt	2.72% 3.16% 6.54% 6.54%	Weighting 0% 0% 100% 100%

Weighted Average Cost of Capital (WACC)							
Source of Capital	Capital Structure	Cost of Capital	Marginal Tax Rate	After-tax Cost of Capital	Weighted Cost		
Equity	50.00%	13.29%		13.29%	6.65%		
Debt	50.00%	6.54%	24.00%	4.97%	2.49%		
WACC	100.00%				9.13%		
WACC (Round	ed)				9.15%		

Notes

- [1] From worksheet: Capital Structure
- [2] From worksheet: Capital Asset Pricing Model Summary
- [3] From worksheet: Yield Equity Summary
- [4] January 2021, Mergent Bond Record
- [5] Montana Department of Revenue High Yield Debt Study

Direct Capitalization Rate Conclusion Industry: Pipelines - Gas 2021 Assessment Year

Capital	Structure	[1]
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Equity	50.00%
Debt	50.00%

Equity Capitalization Rate [2]

NOI After-tax	10.60%
GCF	29.85%

Debt Capitalization Rate [3]

Calculated Current Yield 4.70%

NOI After-tax Direct Capitalization Rate

Source of Capital	Capital Structure	Capitalization Rate	Marginal Tax Rate	After-tax Capitalization Rate	Weighted Capitalization Rate
Equity	50.00%	10.60%		10.60%	5.30%
Debt	50.00%	4.70%	24.00%	3.57%	1.79%
Total	100.00%				7.09%

GCF Direct Capitalization Rate

	Rate	Rate	Rate	Capital Structure	Source of Capital
14.93%	29.85%		29.85%	50.00%	Equity
1.79%	3.57%	24.00%	4.70%	50.00%	Debt
16.71%				100.00%	WACC
				100.00%	WACC Total (Rounded)

Notes:

- [1] From worksheet: Capital Structure
- [2] From worksheet: Direct Equity Summary
- [3] From worksheet: Calculated Current Yield

Selection of Guideline Companies Industry: Pipelines - Gas 2021 Assessment Year

Screening Requirements:

The universe of companies is all companies listed in Value Line under the Pipeline MLPs industry.

Companies were then selected using the following screening criteria:

- 1. Primarily engaged in the gathering, treating, processing, and/or transportation of natural gas and natural gas liquids.
- 2. Actively traded on an American exchange.
- 3. Incorporated as a limited partnership.
- 4. Primarily onshore operations.
- 5. No significant merger & acquisition activity during the year.

Company Ticker	Transportation etc. of NG & NGL's	Actively traded on an American Exchange	Incorporated as LP	Primarily Onshore Operations	Consider as Potential Guideline Company	Not Engaged in Material M&A Activity	Use as Guideline Company	Note
BKEP	NOL 3	LACITATISE	as Lr	Operations	Company	No	Company	Note
BPMP	No					110		
CAPL	No							
CEQP	No							
CQP	No							
DCP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DKL	No							
ENBL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
EPD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
ET	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
GEL	No							
GLP	No							
GPP	No							
HEP	No							
HESM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
MMLP	Yes	Yes	Yes	No				

Selection of Guideline Companies Industry: Pipelines - Gas 2021 Assessment Year

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Company Ticker	Transportation etc. of NG & NGL's	Actively traded on an American Exchange	Incorporated as LP	Primarily Onshore Operations	Consider as Potential Guideline Company	Not Engaged in Material M&A Activity	Use as Guideline Company	Note
MMP	No	_		-				
MPLX	No							
NBLX	No							
NGL	Yes	Yes	Yes	Yes	Yes	Yes	No	[1]
NS	No							
OMP	No							
PAA	No							
PAGP	No							
PBFX	No							
PSXP	No							
RTLR	No							
SHLX	No							
SMLP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
SPH	No							
SRLP	No							
TCP	Yes	Yes	Yes	Yes	Yes	No	No	[2]
WES	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

^{[1] 10-}K data indicates that the NG and NGL segment is not sufficiently impactful to the overall financial performance of the company.

^[2] In October of 2020, TCP received non-binding offer from TC Energy Corporation to acquire all of the outstanding common units of TCP

Support for Capital Structure Industry: Pipelines - Gas 2021 Assessment Year

(\$ and Shares Outstanding In Millions, Except Per Share Amounts)

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	D	C				9		•	3	r.	L	IAI	14
					End of Year Closing				PV of	Total Common, Preferred, LT			
		Industry	Financial	Shares	Stock	MV Common	MV Preferred	MV Long	Operating	Debt, & Op		%	% Debt &
Ticker	Company	Group		Outstanding	Price	Stock	Stock	Term Debt	Leases	Leases	% Common	Preferred	Op Leases
TICKET	Company	Value Line	Value Line	10-K	Yahoo	ExF	10-K	10-K	10-K	G+H+I+J	G/K	H/K	(I+J)/K
		Value Line	value Line	10-10	Tarioo	LAI	Note [1]	Note [2]	10-10	0.111113	0//	17/1	(1.0)//
DCD	DCD Midetreem I D	DIDEMLD	C++	200	10.10	2.700			100	10 566	36%	7%	E70/
DCP	DCP Midstream LP	PIPEMLP	_	208	18.18	3,788	751	5,927		10,566			57%
ENBL	Enable Midstream Part.	PIPEMLP	C++	436	5.12	2,228	362	3,962	28	6,580	34%	6%	61%
EPD	Enterprise Products	PIPEMLP	B+	2,182	19.16	41,823	0	35,000	349	77,172	54%	0%	46%
ET	Energy Transfer LP	PIPEMLP	B+	2,702	6.04	16,322	0	56,210	890	73,422	22%	0%	78%
HESM	Hess Midstream Partners LP	PIPEMLP	С	18	19.17	346	0	1,991	1	2,338	15%	0%	85%
SMLP	Summit Midstream Partners LP	PIPEMLP	С	6	12.49	76	174	1,241	5	1,497	5%	12%	83%
WES	Western Midstream Part.	PIPEMLP	C++	414	13.54	5,602	0	8,290	39	13,931	40%	0%	60%
All Comp	anies					70,186	1,287	112,621	1,412	185,506	38%	1%	61%
Averag	9										29%	3%	67%
Median											34%	0%	61%
Trimme	d Average										29%	3%	68%
High	-										54%	12%	85%
Low											5%	0%	46%
Selected											50%		50%

<u>Median</u>

0%

2%

0%

1%

34%

48%

52%

44%

61%

45%

46%

51%

Current Year

2 Years Prior

3 Year Average

Prior Year

IN	o	ιe	s	:
				_

[1] Market value of preferred stock assumed to equal book value

В

[2] Market value of debt is fair value of long term debt from 10-K notes

MCA 15-1-210, rationale for changes to guideline companies:

2021 - Added ET & WES.

Removed CNXM & EQM because they're no longer listed in the Value Line MLP industry. Removed TCP due to M&A activity.

Capital Asset Pricing Model (CAPM) Industry: Pipelines - Gas 2021 Assessment Year

$k_e = R_f + \beta x ERP$

		EX Post	Ex Ante
k _{e=}	Cost of Equity	11.96%	9.64%
$R_f =$	Risk Free Rate	1.45%	1.45%
β =	Beta	1.45	1.45
ERP =	Equity Risk Premium (R _m - R _f)	7.25%	5.65%
$R_m =$	Market Rate of Return	8.70%	7.10%

Risk Free Rate Measures (R_f):

The Value Line Investment Survey: Selection & Opinion [1]	
January 1, 2021 Page 701	
Selected Yields on Taxable U.S. Treasury Securities as of 12/21/20	
10-year	0.95%
30-year	1.68%
Federal Reserve Statistical Release ^[2] and U.S. Department of the Treasury, Daily Treasury Yield Curve Rates ^[3] U.S. government securities, Treasury constant maturities, Nominal, December 31, 2020	
10-year	0.93%
20-year	1.45%
30-year	1.65%
Risk Free Rate Selected	1.45%

Notes

- [1] "Value Line Selection & Opinion", Value Line (January 3, 2020)
- [2] https://www.federalreserve.gov/datadownload/Choose.aspx?rel=H.15
- [3] https://www.treasury.gov/resource-center/data-chart-center/interest-rates/

Ex Post - Equity Risk Premium Measures (ERP = Rm - Rf)

Duff & Phelps, 2021 Cost of Capital Navigator					
-		$R_{m}^{[4]}$	$\underline{R_{m}}$	R_f	<u>ERP</u>
ERP "Historical" - Ex Post	Arithmetic Avg.	8.70%	8.70%	1.45%	7.25%
ERP "Supply-side" - Ex Post	Arithmetic Avg.	7.45%	7.45%	1.45%	6.00%
Ex Post Equity Risk Premium Selected	- -	8.70%		1.45%	7.25%
	-				

Capital Asset Pricing Model (CAPM) Industry: Pipelines - Gas 2021 Assessment Year

$k_e = R_f + \beta x ERP$

Ex Ante - Equity Risk Premium Measures (ERP = Rm - Rf)
DOR 3 Stage Dividend Growth Model, S & P 500, See Exhibit

DOR 3 Stage Dividend Growth Model, S & P 500, See Exhibit				
ERP - Ex Ante	R _m ^[4] 7.44%	<u>R_m</u> 7.44%	<u>R_f</u> 1.45%	<u>ERP</u> 5.99%
Duff & Phelps, 2021 Cost of Capital Navigator				
ERP "Conditional" - Ex Ante	$R_m^{[4]}$	<u>R</u> 8.00%	<u>R_f</u> 2.50%	<u>ERP</u> 5.50%
Damodaran Implied ERP (Jan 5, 2021)				
	$R_{m}^{[4]}$	R_{m}	$R_{\rm f}$	<u>ERP</u>
Implied Premium (FCFE) - Ex Ante	6.17%	5.65%	0.93%	4.72%
Implied Premium (FCFE with sustainable payout) - Ex Ante	6.39%	5.87%	0.93%	4.94%
	$R_{m}^{[4]}$	\underline{R}_{m}	$R_{\rm f}$	<u>ERP</u>
<u>Average</u>	6.67%	6.74%		5.29%
<u>Median</u>	6.39%	6.66%		5.22%
<u>High</u>	7.44%	8.00%		5.99%
Low	6.17%	5.65%		4.72%
Equity Risk Premium Selected	7.10%		1.45%	5.65%

Notes

 $\overline{[4]\ R_m}$ estimated using selected Risk Free Rate (R_f)

Support for Beta Selection in CAPM Industry: Pipelines - Gas 2021 Assessment Year

Α	В	С	D	E
		Industry	Financial	
Ticker	Company	Group	Strength	Beta
		Value Line	Value Line	Value Line
DCP	DCP Midstream LP	PIPEMLP	C++	1.60
ENBL	Enable Midstream Part.	PIPEMLP	C++	1.90
EPD	Enterprise Products	PIPEMLP	B+	1.10
ET	Energy Transfer LP	PIPEMLP	B+	1.30
HESM	Hess Midstream Partners LP	PIPEMLP	С	1.10
SMLP	Summit Midstream Partners LP	PIPEMLP	С	1.75
WES	Western Midstream Part.	PIPEMLP	C++	1.40
Average				1.45
Median				1.40
Trimmed A	verage			1.43
High				1.90
Low				1.10
Selected				1.45

Inflation & Real Growth Industry: Pipelines - Gas 2021 Assessment Year

				Nominal Growth			
Α	В	C D		Е	F		
Source Description	Inflation (CPI)	Real Growth (GDP)	Nominal Growth	Low	High		
Livingston Survey ^[1]	2.19%	2.21%	4.40%				
Survey of Professional Forecasters ^[2]	2.24%	2.27%	4.51%				
Congressional Budget Office ^[3]	1.90%	3.70%	5.60%				
Average	2.11%	2.73%	4.84%				
Median	2.19%	2.27%	4.46%				
High	2.24%	3.70%	5.94%				
Low	1.90%	2.21%	4.11%				
Selected	2.00%	2.50%	4.50%	4.11%	5.94%		

Inflationary Trend	Factors					
Year	Dec. CPI-U Index	Percent Change From Previous	Dec. to Dec. Conversion Factor	Annual Avg. CPI-U Index	Percent Change From Previous	Annual Conversion Factor
	Note [5]	Note [6]	Note [7]	Note [5]	Note [6]	Note [7]
2008	210.228		1.2390	215.303		1.2021
2009	215.949	2.6%	1.2062	214.537	-0.4%	1.2064
2010	219.179	1.5%	1.1884	218.056	1.6%	1.1869
2011	225.672	2.9%	1.1542	224.939	3.1%	1.1506
2012	229.601	1.7%	1.1345	229.594	2.0%	1.1273
2013	233.049	1.5%	1.1177	232.957	1.4%	1.1110
2014	234.812	0.8%	1.1093	236.736	1.6%	1.0932
2015	236.525	0.7%	1.1013	237.017	0.1%	1.0920
2016	241.432	2.0%	1.0789	240.007	1.2%	1.0783
2017	246.524	2.1%	1.0566	245.120	2.1%	1.0559
2018	251.233	1.9%	1.0368	251.107	2.4%	1.0307
2019	256.974	2.2%	1.0136	255.657	1.8%	1.0123
2020	260.474	1.3%	1.0000	258.811	1.2%	1.0000

Notes

[1] Federal Reserve Bank of Philadelphia The Livingston Survey December 18, 2020 Table 3 Inflation Rate and Real GDP mean

https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey

[2] Federal Reserve Bank of Philadelphia Survey of Professional Forecasters February 12, 2021 Table 8 and Table 9 Average over next 10-Year mean

https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/survey-of-professional-forecasters

[3] Congressional Budget Office, The Budget and Economic Outlook: 2021 to 2031, Table 2-1 https://www.cbo.gov/about/products/budget-economic-data#4

[5] Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, all items, index averages (1982-84=100, unless otherwise noted)

https://www.bls.gov/cpi/tables/supplemental-files/historical-cpi-u-202001.pdf

[6] (Row year - Previous Year) / Row Year

[7] Most current year / Row year

3 Stage Dividend Discount Model (DDM) Industry: Pipelines - Gas 2021 Assessment Year

 $k_e = (D_1 / P_0) + g$

k_e = Cost of Equity

D₁ = Expected Dividend

P₀ = Current Price Per Share

g = Sustainable Long-Term Growth

Α	В	С	D	E	F	G	Н	I
		2020	2021 Est		Sustainable	Sustainable	Cost of Equity	Cost of Equity
		Year End Stock	Div'ds Decl'd	Expected Equity		Long-Term	Dividend	Earnings
Ticker	Company	Price	per sh	Payout Yield	Growth Rate [1]	Growth Rate [1]	Growth	Growth
		Yahoo	Value Line	D/C	Dividends	Earnings	E+F	E+G
		P_0	D ₁	D ₁ /P ₀	g	g	k _e	k _e
DCP	DCP Midstream LP	18.18	1.56	8.58%	16.01%	9.89%	24.59%	18.47%
ENBL	Enable Midstream Part.	5.12	0.66	12.90%	0.73%	21.39%	13.64%	34.29%
EPD	Enterprise Products	19.16	1.80	9.39%	11.12%	8.68%	20.51%	18.08%
ET	Energy Transfer LP	6.04	0.61	10.10%	11.66%	1.09%	21.76%	11.19%
HESM	Hess Midstream Partners LP	19.17	0.00	0.00%	0.00%	0.00%		
SMLP	Summit Midstream Partners LP	12.49	0.00	0.00%	0.00%	0.00%		
WES	Western Midstream Part.	13.54	1.24	9.16%	25.17%	1.25%	34.33%	10.41%
Average	9						22.96%	18.49%
Median							21.76%	18.08%
Trimme	d Average						22.29%	15.91%
High							34.33%	34.29%
Low							13.64%	10.41%
Selected							22.30%	15.90%

Notes:

[1] From worksheet: DDM Sustainable Long-Term Growth

Support for DDM - Short Term Growth Rate Calculations Industry: Pipelines - Gas 2021 Assessment Year

Α	В	С	D	E	F	G
		End of Year	Div'ds Decl'd	Expected	Div'ds Decl'd	
		Closing Stock	per sh	Dividend	per sh	Short-Term
Ticker	Company	Price	2021 Est	Yield	2024-2026 Est	Growth Rate
		Yahoo	Value Line	D/C	Value Line	Note [1]
DCP	DCP Midstream LP	18.18	1.56	8.58%	3.10	18.73%
ENBL	Enable Midstream Part.	5.12	0.66	12.90%	0.66	0.00%
EPD	Enterprise Products	19.16	1.80	9.39%	2.90	12.66%
ET	Energy Transfer LP	6.04	0.61	10.10%	1.00	13.15%
HESM	Hess Midstream Partners LP	19.17	0.00	0.00%		
SMLP	Summit Midstream Partners LP	12.49	0.00	0.00%		
WES	Western Midstream Part.	13.54	1.24	9.16%	3.45	29.15%

Α	В	С	D	E
		Earnings per	Earnings per	
		share	share	Short-Term
Ticker	Company	2021 Est	2024-2026 Es	Growth Rate
		Value Line	Value Line	Note [1]
DCP	DCP Midstream LP	1.95	3.00	11.37%
ENBL	Enable Midstream Part.	0.60	1.40	23.59%
EPD	Enterprise Products	2.00	2.90	9.73%
ET	Energy Transfer LP	0.90	1.25	8.56%
HESM	Hess Midstream Partners LP	1.62		
SMLP	Summit Midstream Partners LP	0.00		
WES	Western Midstream Part.	2.20	3.45	11.90%

Notes:

[1] 5 year compound annual growth rate (CAGR) - 4 periods

Support for DDM - Sustainable Long Term Growth

Industry: Pipelines - Gas 2021 Assessment Year

Dividend	Dividend Growth Rate S												
Ticker	Company	Year End Stock Price	Expected Short-Term Dividend Growth Rate	Expected Long-Term Growth Rate	Expected Dividend Yield	Internal Rate of Return	Implied Sustainable Long-Term Growth Rate (g)	Initial Investment	D_1	D_2	D_3	D ₄	D_5
						Ke = IRR of	g = IRR - Div.			-	- J		
		Yahoo	Note [1]	Note [2]	D ₁ /P ₀	D ₁ :D ₅₀₀	Yield						
DCP	DCP Midstream LP	18.18	18.73%	4.50%	8.58%	24.59%	16.01%	(18.18)	1.56	1.85	2.20	2.61	3.10
ENBL	Enable Midstream Part.	5.12	0.00%	4.50%	12.90%	13.64%	0.73%	(5.12)	0.66	0.66	0.66	0.66	0.66
EPD	Enterprise Products	19.16	12.66%	4.50%	9.39%	20.51%	11.12%	(19.16)	1.80	2.03	2.28	2.57	2.90
ET	Energy Transfer LP	6.04	13.15%	4.50%	10.10%	21.76%	11.66%	(6.04)	0.61	0.69	0.78	0.88	1.00
HESM	Hess Midstream Partners LP	19.17	0.00%	4.50%	0.00%			(19.17)	0.00	0.00	0.00	0.00	0.00
SMLP	Summit Midstream Partners LP	12.49	0.00%	4.50%	0.00%			(12.49)	0.00	0.00	0.00	0.00	0.00
WES	Western Midstream Part.	13.54	29.15%	4.50%	9.16%	34.33%	25.17%	(13.54)	1.24	1.60	2.07	2.67	3.45

Earnings	arnings Growth Rate St												
Ticker	Company	Year End Stock Price	Expected Short-Term Earnings Growth Rate	Expected Long-Term Growth Rate	Expected Dividend Yield	Internal Rate of Return	Implied Sustainable Long-Term Growth Rate (g)	Initial Investment	D ₁	D_2	D_3	D_4	D ₅
						Ke = IRR of	g = IRR - Div.						
		Yahoo	Note [1]	Note [2]	D_1/P_0	D ₁ :D ₅₀₀	Yield						
DCP	DCP Midstream LP	18.18	11.37%	4.50%	8.58%	18.47%	9.89%	(18.18)	1.56	1.74	1.93	2.15	2.40
ENBL	Enable Midstream Part.	5.12	23.59%	4.50%	12.90%	34.29%	21.39%	(5.12)	0.66	0.82	1.01	1.25	1.54
EPD	Enterprise Products	19.16	9.73%	4.50%	9.39%	18.08%	8.68%	(19.16)	1.80	1.98	2.17	2.38	2.61
ET	Energy Transfer LP	6.04	0.00%	4.50%	10.10%	11.19%	1.09%	(6.04)	0.61	0.61	0.61	0.61	0.61
HESM	Hess Midstream Partners LP	19.17	0.00%	4.50%	0.00%			(19.17)	0.00	0.00	0.00	0.00	0.00
SMLP	Summit Midstream Partners LP	12.49	11.90%	4.50%	0.00%			(12.49)	0.00	0.00	0.00	0.00	0.00
WES	Western Midstream Part.	13.54	0.00%	4.50%	9.16%	10.41%	1.25%	(13.54)	1.24	1.24	1.24	1.24	1.24

Notes:
[1] From worksheet: DDM Short Term Growth Rate Calculations
[2] From worksheet: Inflation & Real Growth

Support for DDM - Sustainable Long Term Growth Industry: Pipelines - Gas 2021 Assessment Year

Dividend	end Stage 2															Stage 3			
Ticker	D ₆	D_7	D_8	D ₉	D ₁₀	D ₁₁	D ₁₂	D ₁₃	D ₁₄	D ₁₅	D ₁₆	D ₁₇	D ₁₈	D ₁₉	D_{20}	D ₂₁	D ₂₂	D ₅₀₀	
DCP	3.65	4.30	5.07	5.97	7.03	8.28	9.75	11.48	13.52	15.93	18.76	22.09	26.02	30.65	36.10	37.72	39.42	54,114,201,543	
ENBL	0.66	0.66	0.67	0.67	0.67	0.67	0.67	0.68	0.68	0.68	0.68	0.68	0.69	0.69	0.69	0.72	0.75	1,034,849,861	
EPD	3.25	3.65	4.09	4.58	5.14	5.76	6.46	7.24	8.12	9.10	10.21	11.44	12.83	14.38	16.13	16.85	17.61	24,176,581,566	
ET	1.13	1.27	1.43	1.61	1.81	2.04	2.29	2.58	2.90	3.27	3.68	4.14	4.66	5.25	5.91	6.18	6.46	8,862,066,313	
HESM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
SMLP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	
WES	4.40	5.61	7.15	9.12	11.63	14.83	18.91	24.11	30.74	39.19	49.97	63.72	81.25	103.60	132.09	138.04	144.25	198,016,771,180	

Earnings	nings Stage 2 Stage 3															Stage 3		
Ticker	D ₆	D ₇	D_8	D ₉	D ₁₀	D ₁₁	D ₁₂	D ₁₃	D ₁₄	D ₁₅	D ₁₆	D ₁₇	D ₁₈	D ₁₉	D ₂₀	D ₂₁	D ₂₂	D ₅₀₀
	-6	-7	- 0	- 9	- 10	-11	- 12	- 13	- 14	- 15	- 16	- 17	- 16	- 19	- 20	-21	- 22	- 500
DCP	2.66	2.95	3.27	3.63	4.03	4.47	4.96	5.50	6.10	6.76	7.50	8.32	9.23	10.23	11.35	11.86	12.39	17,012,066,912
ENBL	1.88	2.30	2.82	3.45	4.22	5.16	6.31	7.72	9.44	11.55	14.13	17.28	21.13	25.85	31.62	33.05	34.53	47,403,878,973
EPD	2.85	3.12	3.42	3.74	4.09	4.47	4.89	5.35	5.85	6.40	7.00	7.66	8.38	9.16	10.02	10.47	10.95	15,025,936,817
ET	0.61	0.61	0.62	0.62	0.62	0.62	0.62	0.62	0.63	0.63	0.63	0.63	0.63	0.64	0.64	0.67	0.70	956,452,144
HESM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
SMLP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
WES	1.24	1.25	1.25	1.25	1.26	1.26	1.27	1.27	1.27	1.28	1.28	1.29	1.29	1.29	1.30	1.36	1.42	1,944,263,374

Support for Yield Capitalization Rate - Debt Rating Industry: Pipelines - Gas 2021 Assessment Year

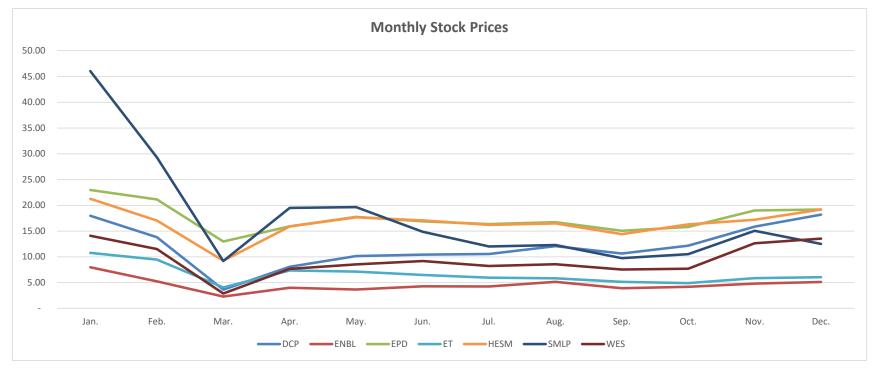
Α	В	С	D	E	F
				Moody's	
		Industry	Financial	Long Term	Numeric
Ticker	Company	Group	Strength	Rating	Rating
		Value Line	Value Line	Moodys.com	
DCP	DCP Midstream LP	PIPEMLP	C++	Ba2	12
ENBL	Enable Midstream Part.	PIPEMLP	C++	Baa3	10
EPD	Enterprise Products	PIPEMLP	B+		
ET	Energy Transfer LP	PIPEMLP	B+		
HESM	Hess Midstream Partners LP	PIPEMLP	С	Ba2	12
SMLP	Summit Midstream Partners LP	PIPEMLP	С	B3	16
WES	Western Midstream Part.	PIPEMLP	C++	Ba2	12
All Com	panies				
Averag	ge				12
Media	n				12
Trimm	ed Average				12
High					16
Low					10
Selected	1			Ba2	12

Support for Direct Capitalization - Equity Capitalization Rates Industry: Pipelines - Gas 2021 Assessment Year

Α	В	С	D	Е	F	G	Н	ı	J	K	L	M	N	0	Р	Q	R
													Ke	Ke			
		End of											Estimate -	Estimate -			1
		Year					Ke	Ke					Cash	Cash			1
		Closing					Estimate -	Estimate -	VL Historic	VL Est		VL Est	Flow	Flow		Book	1
		Stock	VL Historic		VL Historic	VL Est P/E	Earnings	Earnings	Cash Flow	Cash Flow	VL Historic	P/CF	(Hist.	(Est.	Market Value	Value	1
Ticker	Company	Price	EPS	VL Est EPS	P/E Ratio	Ratio	(Hist. P/E)	(Est. P/E)	Per Share	Per Share	P/CF Ratio	Ratio	P/CF)	P/CF)	of Equity	of Equity	MTBR
		Yahoo	Value Line	Value Line	C/D	C/E	1/F	1/G	Value Line	Value Line	C/J	C/K	1/L	1/M	Price x Shrs	Value Line	P/Q
DCP	DCP Midstream LP	18.18	(1.75)	1.95	(10.39)	9.32		10.73%	2.36	4.60	7.70	3.95	12.98%	25.30%	3,788	6,605	0.57
ENBL	Enable Midstream Part.	5.12	0.63	0.60	8.12	8.53	12.32%	11.73%	1.98	1.60	2.58	3.20	38.71%	31.28%	2,228	7,372	0.30
EPD	Enterprise Products	19.16	1.71	2.00	11.21	9.58	8.92%	10.44%	2.99	2.65	6.41	7.23	15.60%	13.83%	41,823	24,764	1.69
ET	Energy Transfer LP	6.04	0.76	0.90	7.95	6.71	12.58%	14.90%	2.50	2.05	2.42	2.95	41.39%	33.94%	16,322	21,827	0.75
HESM	Hess Midstream Partners LP	19.17	1.31	0.00	14.63		6.83%		12.12	0.00	1.58		63.22%		346	132	2.63
SMLP	Summit Midstream Partners LP	12.49	63.91	0.00	0.20				(98.94)	0.00	(0.13)				76	791	0.10
WES	Western Midstream Part.	13.54	1.20	2.20	11.28	6.15	8.86%	16.25%	2.66	4.10	5.09	3.30	19.65%	30.29%	5,602	3,196	1.75
Average)				6.14	8.06	9.90%	12.81%	-		3.67	4.13	31.93%	26.93%			1.11
Median					8.12	8.53	8.92%	11.73%			2.58	3.30	29.18%	30.29%			0.75
Trimme	d Average				7.75	8.19	10.03%	12.45%			3.62	3.48	28.84%	28.96%			1.01
High					14.63	9.58	12.58%	16.25%			7.70	7.23	63.22%	33.94%			2.63
Low					(10.39)	6.15	6.83%	10.44%			(0.13)	2.95	12.98%	13.83%			0.10
Selected					•		10.	60%					29.8	5%			0.75

Support of Stock Price - From YAHOO Finance Industry: Pipelines - Gas 2021 Assessment Year

		End of Period Closing Stock Price												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Α	В	С	D	Е	F	G	Н	ı	J	K	L	M	N	
Ticker	Company	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
DCP	DCP Midstream LP	17.98	13.82	3.61	8.07	10.14	10.42	10.56	12.06	10.63	12.15	15.85	18.18	
ENBL	Enable Midstream Part.	7.96	5.25	2.26	3.99	3.65	4.28	4.25	5.14	3.90	4.19	4.79	5.12	
EPD	Enterprise Products	22.96	21.14	12.95	15.90	17.76	16.89	16.36	16.73	15.04	15.78	18.98	19.16	
ET	Energy Transfer LP	10.76	9.47	4.03	7.35	7.14	6.47	5.95	5.84	5.15	4.89	5.87	6.04	
HESM	Hess Midstream Partners LP	21.26	17.03	9.23	15.89	17.65	17.07	16.20	16.47	14.40	16.29	17.20	19.17	
SMLP	Summit Midstream Partners LP	46.03	29.29	9.15	19.50	19.65	14.85	12.00	12.30	9.75	10.50	15.04	12.49	
WES	WES Western Midstream Part.		11.50	2.85	7.64	8.53	9.17	8.22	8.55	7.55	7.69	12.64	13.54	



Support for Direct Capitalization - Debt Capitalization Rate Industry: Pipelines - Gas 2021 Assessment Year

(\$ in Millions)

Α	В	С	D	E	F	G	Н	1	J
		Current Year	Previous Year	Previous Year	Current Year	Current Year	Average	Current Yield	MTBR
Ticker	Company	Interest Exp.	MV LT Debt	BV LT Debt	MV LT Debt	BV LT Debt	MV LT Debt	Current field	IVIIDN
	Source	10-K	10-K	10-K	10-K	10-K	(D+F)/2	(C/H)	(F/G)
DCP	DCP Midstream LP	302	6,118	5,924	5,927	5,624	6,023	5.01%	1.05
ENBL	Enable Midstream Part.	178	4,184	4,220	3,962	3,951	4,073	4.37%	1.00
EPD	Enterprise Products	1,287	30,370	27,625	35,000	29,866	32,685	3.94%	1.17
ET	Energy Transfer LP	2,327	54,790	51,054	56,210	51,438	55,500	4.19%	1.09
HESM	Hess Midstream Partners LP	95	1,820	1,754	1,991	1,910	1,906	4.97%	1.04
SMLP	Summit Midstream Partners LP	79	1,484	1,628	1,241	1,347	1,362	5.79%	0.92
WES	Western Midstream Part.	380	7,858	7,959	8,290	7,855	8,074	4.71%	1.06
All Comp	panies	4,648			112,621	101,991	109,622	4.24%	1.10
Averag	e							4.71%	1.05
Mediar	า							4.71%	1.05
Trimme	ed Average							4.65%	1.05
High								5.79%	1.17
Low								3.94%	0.92
Selected								4.70%	1.05

Maintenance Capital Expenditures Estimate Based on Guideline Companies Industry: Pipelines - Gas 2021 Assessment Year

(\$ In Millions)

5

6

8

9

10

11

130.00%

Α	В	С	D	E	F	G	Н	I	J	K	L
							Average				
			PP&E,	PP&E,	Average	Depreciation	Life of			Replacement	RC as % of
Ticker	Company	Inflation	Gross	Gross	PP&E	Expense	Assets			Cost (RC)	Depreciation
				Previous							
			Current Year	Year				Note [1]	Note [1]	Note [1]	
		MTDOR (CPI)	10-K, Notes	10-K, Notes	(D+E)/2	10-K (CF)	F/G	C*H	1/(1+C)^H	G*I/(1-J)	K/G
DCP	DCP Midstream LP	2.00%	13,420	14,504	13,962	376	37	0.74	0.48	536	142.64%
ENBL	Enable Midstream Part.	2.00%	13,220	13,161	13,191	420	31	0.63	0.54	570	135.64%
EPD	Enterprise Products	2.00%	57,498	55,285	56,391	2,072	27	0.54	0.58	2,707	130.65%
ET	Energy Transfer LP	2.00%	94,115	89,790	91,953	3,678	25	0.50	0.61	4,710	128.05%
HESM	Hess Midstream Partners LP	2.00%	4,163	3,905	4,034	157	26	0.51	0.60	202	128.88%
SMLP	Summit Midstream Partners LP	2.00%	2,346	2,326	2,336	119	20	0.39	0.68	145	121.88%
WES	Western Midstream Part.	2.00%	12,642	12,356	12,499	491	25	0.51	0.60	631	128.58%
Average	•										130.90%
Median											128.88%
Trimme	d Average										130.36%
High											142.64%
Low											121.88%

Notes

Selected

2

[1] Cornell, B. & Gerger, R. (2017). Estimating Terminal Values with Inflation: The Inputs Matter-It Is Not a Formulaic Exercise. Business Valuation Review, Volume 36, Number 4, 117-123.

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