

COST OF CAPITAL STUDY

YIELD CAPITALIZATION
2024 Assessment Year

APPENDIX C

Pipeline Industry

EQUITY RATE						9.50%	
CAPITAL ASSET PRICING MODEL							PAGE
	CAPM Ex Ante		8.84%				4
DIVIDEND GROWTH MODELS Single Stage							
	Value Line, based on Dividends Growth		10.00%				5
	Value Line, based on Earnings Growth		17.00%				6
	Value Line, based on Return on Equity		7.20%				7
DIVIDEND GROWTH MODELS Sustainable Growth							
	Value Line, based on Dividends Growth		10.00%				5a
	Value Line, based on Earnings Growth		10.40%				6a
FCFE GROWTH MODEL Multi Stage							
			9.50%				8
				RANGE	7.2% - 17.00%		
DEBT YIELD RATE						6.00%	9
Cost of Secured Debt (Operating Lease) Rate						5.00%	9
MARKET CAPITAL STRUCTURE							
	Equity	60%	x	9.50%	=	5.70%	3
	Debt	40%	x	6.00%	=	2.40%	3
	Marginal Tax Rate	24%	=	(1-.24)	x	2.40%	
						<u>1.82%</u>	
WEIGHTED AVERAGE COST OF CAPITAL						7.52%	

SUPPORT FOR GUIDELINE COMPANIES

Washington State Department of Revenue

2024 Assessment Year

Pipeline Industry

Capital Structure at Book Value

Company	Ticker	Beta	Fin'l Strength	P/E Ratio	Div'd Yield	Common Stock	%	Preferred Stock	%	Long Term Debt	%	Total Debt & Equity
Enbridge Inc	enb.to	0.85	B++	17.6	7.6%	61,426,950,000	40.5%	7,747,000,000	5.1%	82,447,000,000	54.4%	151,620,950,000
Kinder Morgan Inc	kmi	1.10	B+	15.7	6.5%	31,722,800,000	53.2%			27,900,000,000	46.8%	59,622,800,000
ONEOK Inc	oke	1.50	B+	17.0	5.5%	16,513,875,000	43.5%			21,450,000,000	56.5%	37,963,875,000
Pembina Pipeline Corp	ppl.to	1.05	B+	21.0	5.8%	16,277,850,000	53.8%	2,424,000,000	8.0%	11,537,000,000	38.2%	30,238,850,000
TC Energy Corp	trp	1.05	B++	11.4	7.0%	24,024,000,000	31.8%	2,818,000,000	3.7%	48,789,100,000	64.5%	75,631,100,000
The Williams Cos Inc	wmb	1.10	B+	17.6	5.1%	11,554,515,000	33.1%			23,376,000,000	66.9%	34,930,515,000
Mean		1.11		16.7	6.3%	26,919,998,333	42.6%		5.6%	35,916,516,667	54.5%	
Harmonic Mean		1.08					40.9%		5.1%		52.6%	
Weighted Mean						161,519,990,000	41.4%	12,989,000,000	3.3%	215,499,100,000	55.3%	390,008,090,000
Median		1.08			6.2%		42.0%		5.1%		55.4%	

SUPPORT FOR CAPITAL STRUCTURE Market Value

Washington State Department of Revenue

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Pipeline Industry

Company	Ticker	Stock Price	Common Shares	Common Stock	%	Preferred Stock	%	Long Term Debt	%	Total Debt & Equity
Enbridge Inc	enb.to	46.76	2,125,500,000	99,388,380,000	59.7%	7,747,000,000	4.7%	59,356,000,000	35.7%	166,491,380,000
Kinder Morgan Inc	kmi	17.35	2,234,000,000	38,759,900,000	56.9%	-		29,317,000,000	43.1%	68,076,900,000
ONEOK Inc	oke	69.23	582,500,000	40,326,475,000	65.3%	-		21,400,000,000	34.7%	61,726,475,000
Pembina Pipeline Corp	ppl.to	45.62	549,000,000	25,045,380,000	71.7%	2,424,000,000	6.9%	7,485,240,000	21.4%	34,954,620,000
TC Energy Corp	trp	39.09	1,040,000,000	40,653,600,000	48.6%	2,818,000,000	3.4%	40,139,400,000	48.0%	83,611,000,000
The Williams Cos Inc	wmb	34.83	1,222,700,000	42,586,641,000	66.4%	-		21,569,000,000	33.6%	64,155,641,000
Mean					61.4%		5.0%		36.1%	
Harmonic Mean					60.5%		4.6%		33.8%	
Weighted Mean				286,760,376,000	59.9%	12,989,000,000	2.7%	179,266,640,000	37.4%	479,016,016,000
Median					62.5%		4.7%		35.2%	
Std Dev					8.1%		1.8%		9.1%	
Coefficient of Variation					13.3%		36.2%		25.2%	
Target					60%				40%	100%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT CAPITAL ASSET PRICING MODEL

2024 Assessment Year

Ex Ante

$$K_e = R_f + B (R_p)$$

Ke = Cost of Equity				8.84%
				to page 1
	Rm =	rate of return	8.48%	
	Rf =	risk free rate	4.03%	
	Rp =	risk premium	4.45%	
	B =	Beta	1.08	page 7
Rp = Risk Premium				4.45%
				to above
	Shannon Pratt and Roger Grabowski		3.5 - 6%	
	Cost of Capital, App and Exam, 5th Ed, 2014			
	Dr. Aswath Damodaran		4.60%	chart page 15
	http://pages.stern.nyu.edu/~adamodar/		4.45%	adjusted for Rf
	2022 Implied Premium			
Rf = Risk Free Rate				4.03%
				to above
	Value Line Investment Survey, Selected Yields January 12, 2024, page 829			
	as of 12-29-23			
	US Treasury Securities year end data			
		5 year	3.84%	
		10 year	3.88%	
		30 year	4.03%	
		30 year Zero	4.00%	
	Federal Reserve Statistical Release (http://www.federalreserve.gov/Releases/H15/Current/)			
	As of 12-29-23	Treasury Constant Maturities		
		5 year	3.84%	
		10 year	3.88%	
		20 year	4.20%	
		30 year	4.03%	
		20 year TIPS	1.82%	2.38%
		30 year TIPS	1.90%	2.13%
				TIPS inflation indication
Inflation				2.13%
				to appraisal template
	The Livingston Survey December 15, 2023, page 2, 8			
	Inflation median (measured by the Consumer Price Index) over next 10 years			2.26%
Gross Domestic Product (GDP) Nominal				3.93%
				real GDP + inflation est
	Federal Reserve Projected Long Run Real GDP Growth			
	Median Projection Value From Dec 13, 2023 Report			1.80%
	https://www.federalreserve.gov/monetarypolicy/files/fomcprojtab120231213.pdf			
	Congressional Budget Office Real GDP Economic Projections			
	The Budget and Economic Outlook 2024-2034			Table 2.3, pg 55
	Average Percentage Change Year To Year	2024-2028		2.20%
	https://www.cbo.gov/system/files/2024-02/59710-Outlook	2029-2034		1.90%
	Federal Reserve Bank of Philadelphia			
	The Livingston Survey, December 15, 2023, page 8			
	Average Real GDP Growth Rate for Next 10 Years			2.00%
	https://www.philadelphiafed.org/research-and-data/real-time-center/livingston-survey			

**SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT
DIVIDEND GROWTH MODEL**

Washington State Department of Revenue
2024 Assessment Year
Pipeline Industry

Based on Dividend Growth

$$K_e = (D_1 / P_0) + G$$

Ke = Cost of Equity
D1 = Expected Dividends
Po = Current Price
G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Dividend Growth (G)	Ke with Short Term Growth
Enbridge Inc	enb.to	46.760	3.65	7.81%	2.50%	10.31%
Kinder Morgan Inc	kmi	17.350	1.15	6.63%	5.50%	12.13%
ONEOK Inc	oke	69.230	3.96	5.72%	3.50%	9.22%
Pembina Pipeline Corp	ppl.to	45.620	2.76	6.05%	3.00%	9.05%
TC Energy Corp	trp	39.090	2.90	7.42%	5.00%	12.42%
The Williams Cos Inc	wmb	34.830	1.90	5.46%	3.50%	8.96%
Mean Range						10.35%
Harmonic Mean Range						10.16%
Median Range						9.76%
Max						12.42%
Min						8.96%
Std Dev Range						1.57%
Coefficient of Variation						15.19%
Say						10.00%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT DIVIDEND GROWTH MODEL

Washington State Department of Revenue

2024 Assessment Year

Pipeline Industry

Based on Dividend Growth

$$K_e = (D_1 / P_o) + G$$

Ke = Cost of Equity
 D1 = Expected Dividends
 Po = Current Price
 G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Dividend Growth (G)	Dividend Growth LT	Ke Sustainable
Enbridge Inc	enb.to	46.76	3.65	7.81%	2.50%	2.50%	10.31%
Kinder Morgan Inc	kmi	17.35	1.15	6.63%	5.50%	3.93%	10.56%
ONEOK Inc	oke	69.23	3.96	5.72%	3.50%	3.50%	9.22%
Pembina Pipeline Corp	ppl.to	45.62	2.76	6.05%	3.00%	3.00%	9.05%
TC Energy Corp	trp	39.09	2.90	7.42%	5.00%	3.93%	11.35%
The Williams Cos Inc	wmb	34.83	1.90	5.46%	3.50%	3.50%	8.96%
Mean Range							9.91%
Harmonic Mean Range							9.83%
Median Range							9.76%
Max							11.35%
Min							8.96%
Std Dev Range							0.98%
Coefficient of Variation							9.86%
Say							10.00%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT DIVIDEND GROWTH MODEL

Washington State Department of Revenue

2024 Assessment Year

Pipeline Industry

Based on Earnings Growth

$$K_e = (D_1 / P_0) + G$$

Ke = Cost of Equity
 D1 = Expected Dividends
 Po = Current Price
 G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Earnings Growth (G)	Ke with Short Term Growth
Enbridge Inc	enb.to	46.760	3.65	7.81%	5.00%	12.81%
Kinder Morgan Inc	kmi	17.350	1.15	6.63%	15.00%	21.63%
ONEOK Inc	oke	69.230	3.96	5.72%	13.50%	19.22%
Pembina Pipeline Corp	ppl.to	45.620	2.76	6.05%	10.00%	16.05%
TC Energy Corp	trp	39.090	2.90	7.42%	12.00%	19.42%
The Williams Cos Inc	wmb	34.830	1.90	5.46%	10.00%	15.46%
Mean Range						17.43%
Harmonic Mean Range						16.91%
Median Range						17.64%
Max						21.63%
Min						12.81%
Std Dev						3.22%
Coefficient of Variation						18.50%
Say						17.00%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT DIVIDEND GROWTH MODEL

Washington State Department of Revenue
2024 Assessment Year
Pipeline Industry

Based on Dividend Growth

$$K_e = (D_1 / P_0) + G$$

Ke = Cost of Equity
D1 = Expected Dividends
Po = Current Price
G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Earnings Growth (G)	Dividend Growth LT	Ke Sustainable
Enbridge Inc	enb.to	46.76	3.65	7.81%	5.00%	3.93%	11.74%
Kinder Morgan Inc	kmi	17.35	1.15	6.63%	15.00%	3.93%	10.56%
ONEOK Inc	oke	69.23	3.96	5.72%	13.50%	3.93%	9.65%
Pembina Pipeline Corp	ppl.to	45.62	2.76	6.05%	10.00%	3.93%	9.98%
TC Energy Corp	trp	39.09	2.90	7.42%	12.00%	3.93%	11.35%
The Williams Cos Inc	wmb	34.83	1.90	5.46%	10.00%	3.93%	9.39%
Mean Range							10.44%
Harmonic Mean Range							10.37%
Median Range							10.27%
Max							11.74%
Min							9.39%
Std Dev Range							0.95%
Coefficient of Variation							9.05%
Say							10.40%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

DIVIDEND GROWTH MODEL

Washington State Department of Revenue

2024 Assessment Year

Pipeline Industry

Based on Return on Equity $K_e = (D1 / P_o) + G$

- Ke** = Cost of Equity
- D1** = Expected Dividends
- E1** = Expected Earnings
- Po** = Current Price
- G** = Sustainable Growth
- b** = Retained Earnings % = (1 - Payout Ratio)
- ROE** = Return on Equity = (E1 / Po)

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Expected Earnings (E1)	Dividend Yield (D1/Po)	Retained Earnings (b)	ROE (E1/Po)	Growth (b*ROE)	Ke Dividends	Ke Earnings
Enbridge Inc	enb.to	46.760	3.65	2.45	7.81%	NMF	5.24%	NMF	NMF	NMF
Kinder Morgan Inc	kmi	17.350	1.15	1.15	6.63%	-7.0%	6.63%	-0.46%	6.16%	6.16%
ONEOK Inc	oke	69.230	3.96	5.50	5.72%	8.0%	7.94%	0.64%	6.36%	8.58%
Pembina Pipeline Corp	ppl.to	45.620	2.76	2.90	6.05%	-11.0%	6.36%	-0.70%	5.35%	5.66%
TC Energy Corp	trp	39.090	2.90	3.60	7.42%	15.0%	9.21%	1.38%	8.80%	10.59%
The Williams Cos Inc	wmb	34.830	1.90	2.25	5.46%	6.0%	6.46%	0.39%	5.84%	6.85%
Mean									6.50%	7.57%
Harmonic Mean									6.32%	7.18%
Median									6.16%	6.85%
Std Dev									1.34%	2.02%
Coefficient of Variation									20.60%	26.67%

say **7.20%**

**SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT
FREE CASH FLOW TO EQUITY MODEL MULTI STAGE**

Washington State Department of Revenue

2024 Assessment Year

Pipeline Industry

Company	Ticker	Stock Price	Expected Earnings	P/E	Payout Ratio	ROE	Ke
Enbridge Inc	enb.to	46.76	2.45	19.09	NMF	8.00%	7.39%
Kinder Morgan Inc	kmi	17.35	1.15	15.09	100.00%	7.50%	9.99%
ONEOK Inc	oke	69.23	5.50	12.59	72.00%	18.50%	11.89%
Pembina Pipeline Corp	ppl.to	45.62	2.90	15.73	95.00%	9.00%	8.93%
TC Energy Corp	trp	39.09	3.60	10.86	81.00%	14.50%	13.03%
The Williams Cos Inc	wmb	34.83	2.25	15.48	84.00%	23.50%	8.01%
Mean				14.80	86.40%	13.50%	9.87%
Harmonic Mean				14.34	85.23%	11.21%	9.48%
Median				15.28	84.00%	11.75%	9.46%
Industry Summary				15.00	93.00%	13.00%	

Say 9.50%

SUPPORT FOR DEBT RATING AND DEBT YIELD

Washington State Department of Revenue

2024 Assessment Year

Pipeline Industry

Company	Ticker	Mergent's Ratings	S&P Ratings
Enbridge Inc	enb.to	Baa1	BBB+
Kinder Morgan Inc	kmi	Baa2	BBB
ONEOK Inc	oke	Baa2	BBB
Pembina Pipeline Corp	ppl.to		BBB
TC Energy Corp	trp	Baa2	BBB+
The Williams Cos Inc	wmb	Baa2	BBB
Overall Average Debt Rating		Baa2	BBB

Mergent's Bond Record January 2024, page 101				
Corporate	Aaa	Aa	A	Baa
October	5.61%	5.97%	6.18%	6.63%
November	5.61%	5.57%	5.78%	6.19%
December	4.74%	5.05%	5.25%	5.64%
4th Qtr Average	5.32%	5.53%	5.74%	6.15%
Public Utilities	Aaa	Aa	A	Baa
October		6.19%	6.34%	6.61%
November		5.82%	5.96%	6.20%
December		5.27%	5.42%	5.68%
4th Qtr Average		5.76%	5.91%	6.16%
Industrials	Aaa	Aa	A	Baa
October	5.61%	5.76%	6.02%	6.64%
November	5.20%	5.32%	5.59%	6.18%
December	4.74%	4.82%	5.07%	5.60%
4th Qtr Average	5.18%	5.30%	5.56%	6.14%

	20Y	25Y	30Y
Bloomberg S&P Bond Yields			
December 2023: BBB	6.33%	6.29%	6.28%

Debt Yield Rate	6.00%
Cost of Secured Debt (Operating Lease) Rate	5.00%

SUPPORT FOR DIRECT CAPITALIZATION EQUITY COMPONENT

2024 Assessment Year

Pipeline Industry

Company	Ticker	Stock Price	2022		2023		2022		2023	
			Actual Earnings Ratio (EPS/P)		Projected Earnings Ratio (PEPS/P)		Cash Flow Ratio (CF/P)		Projected Cash Flow Ratio	
Enbridge Inc	enb.to	46.760	2.49	5.3%	2.45	5.2%	4.65	9.9%	4.70	10.1%
Kinder Morgan Inc	kmi	17.350	1.06	6.1%	1.15	6.6%	2.08	12.0%	2.15	12.4%
ONEOK Inc	oke	69.230	4.75	6.9%	5.50	7.9%	5.30	7.7%	6.75	9.8%
Pembina Pipeline Corp	ppl.to	45.620	2.45	5.4%	2.90	6.4%	3.75	8.2%	4.50	9.9%
TC Energy Corp	trp	39.090	3.25	8.3%	3.60	9.2%	5.25	13.4%	5.75	14.7%
The Williams Cos Inc	wmb	34.830	1.91	5.5%	2.25	6.5%	3.55	10.2%	4.35	12.5%
Mean			6.2%		7.0%		10.2%		11.5%	
Harmonic Mean			6.1%		6.8%		9.9%		11.3%	
Median			5.8%		6.5%		10.1%		11.2%	
Max			8.3%		9.2%		13.4%		14.7%	
Min			5.3%		5.2%		7.7%		9.8%	
Std Dev			1.2%		1.4%		2.2%		2.0%	
Coefficient of Variation			18.8%		20.0%		21.4%		17.3%	
Say			6.0%		6.8%		10.0%		11.2%	

Source: VL/Year End Stock Price

SUPPORT FOR DIRECT CAPITALIZATION EQUITY COMPONENT

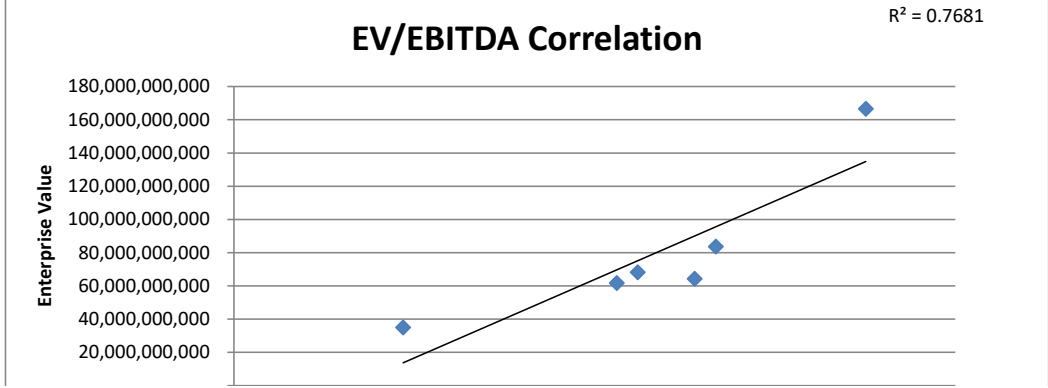
2024 Assessment Year

Company	Ticker	Stock Price	Enterprise Value	EBITDA Historical	Annual Change VL	EBITDA Forecast	EV / EBITDA Forecast	Revenue Forecast	EV / Sales Forecast	Cashflow Forecast	Debt Service	EV / CF Forecast	
Enbridge Inc	enb.to	46.760	166,491,380,000	10,399,080,000	1.08%	10,510,898,065	15.84	45,166,875,000	3.69	9,989,850,000	3,561,360,000	12.29	
Kinder Morgan Inc	kmi	17.350	68,076,900,000	6,500,000,000	3.37%	6,718,750,000	10.13	17,425,200,000	3.91	4,803,100,000	1,759,020,000	10.37	
ONEOK Inc	oke	69.230	61,726,475,000	4,999,000,000	27.36%	6,366,650,943	9.70	22,280,625,000	2.77	3,931,875,000	1,284,000,000	11.83	
Pembina Pipeline Corp	ppl.to	45.620	34,954,620,000	2,346,120,000	20.00%	2,815,344,000	12.42	9,607,500,000	3.64	2,470,500,000	449,114,400	11.97	
TC Energy Corp	trp	39.090	83,611,000,000	7,321,080,000	9.52%	8,018,325,714	10.43	12,272,000,000	6.81	5,980,000,000	2,408,364,000	9.97	
The Williams Cos Inc	wmb	34.830	64,155,641,000	6,253,000,000	22.54%	7,662,126,761	8.37	12,104,730,000	5.30	5,318,745,000	1,294,140,000	9.70	
							Mean	11.15	4.35				11.02
							Harmonic Mean	10.70	4.00				10.92
							Median	10.28	3.80				11.10
							Std Dev	2.65	1.46				1.13

Source: **Say** **11.00** **4.00** **11.00**
 Value Line & Morning Star

Forecast EV/EBITDA By Rank

Guideline Companies	EV/EBITDA forecast	
The Williams Cos Inc	8.37	9.34 Low Harmonic mean
ONEOK Inc	9.70	9.40 Low Average
Kinder Morgan Inc	10.13	9.70 Low Median
TC Energy Corp	10.43	9.50 Say
Pembina Pipeline Corp	12.42	12.89 High Average
Enbridge Inc	15.84	12.42 High Median
		12.52 High Harmonic mean
		12.50 Say



SUPPORT FOR DIRECT CAPITALIZATION EQUITY COMPONENT

2024 Assessment Year

Pipeline Industry

Company	Ticker	Stock Price	Revenues Multiple	Cash Flow Multiple	Earnings Multiple	Book Value Multiple				
Enbridge Inc	enb.to	46.760	20.55	2.28	4.65	10.06	2.49	18.78	28.90	1.62
Kinder Morgan Inc	kmi	17.350	6.86	2.53	2.08	8.34	1.06	16.37	14.20	1.22
ONEOK Inc	oke	69.230	32.20	2.15	5.30	13.06	4.75	14.57	28.35	2.44
Pembina Pipeline Corp	ppl.to	45.620	16.40	2.78	3.75	12.17	2.45	18.62	29.65	1.54
TC Energy Corp	trp	39.090	11.30	3.46	5.25	7.45	3.25	12.03	23.10	1.69
The Williams Cos Inc	wmb	34.830	8.92	3.90	3.55	9.81	1.91	18.24	9.45	3.69
		Mean	2.85	10.15	16.43	2.03				
		Harmonic Mean	2.72	9.77	16.02	1.79				
		Median	2.66	9.93	17.30	1.66				
		Max	3.90	13.06	18.78	3.69				
		Min	2.15	7.45	12.03	1.22				
		Say	2.75	9.80	16.25	2.00				

Source: VL/Year End Stock Price

DATA INPUT

Washington State Department of Revenue
 2024 Assessment Year
 Pipeline Industry

Historic Figures (2023)

Guideline Companies		Stock Price 12/29/23	Beta Levered	Fin'l Strength	Revenues Per Share	Cash Flow Per Share	Earnings Per Share	Dividends Per Share	Bk Value Per Share	Common Shares	LTD (BV)	Trailing P/E Ratio	Div Yield	Operating Margin	Calculated Debt	
Name	Ticker	Yahoo	V L	V L	V L	V L	V L	V L	V L	V L	V L	V L	V L	V L	V L	Formula
Enbridge Inc	enb.to	46.76	0.85	B++	20.55	4.65	2.49	3.55	28.90	2,125,500,000	82,447,000,000	17.6	7.8%	31.0%	96.18%	
Kinder Morgan Inc	kmi	17.35	1.10	B+	6.86	2.08	1.06	1.13	14.20	2,234,000,000	27,900,000,000	15.7	6.7%	45.1%	97.52%	
ONEOK Inc	oke	69.23	1.50	B+	32.20	5.30	4.75	3.82	28.35	582,500,000	21,450,000,000	17.0	4.3%	18.5%	98.62%	
Pembina Pipeline Corp	ppl.to	45.62	1.05	B+	16.40	3.75	2.45	2.66	29.65	549,000,000	11,537,000,000	21.0	5.9%	29.0%	95.14%	
TC Energy Corp	trp	39.09	1.05	B++	11.30	5.25	3.25	2.75	23.10	1,040,000,000	48,789,100,000	11.4	7.7%	28.7%	99.81%	
The Williams Cos Inc	wmb	34.83	1.10	B+	8.92	3.55	1.91	1.79	9.45	1,222,700,000	23,376,000,000	17.6	5.5%	57.5%	95.63%	
											average	16.7		35.0%		
											harmonic mean	16.2		30.7%		
											median	17.3		30.0%		

		Projected (Next Year) 2024									Longer Term Forecasts		Income Statement		
All Div's to Net Profits	Rtn on Shrhldrs Equity	Revenues Per Share	Cash Flow Per Share	Earnings Per Share	Dividends Per Share	Bk Value Per Share	All Div's to Net Profits	Rtn on Shrhldrs Equity	CF Projection 27-29	Earnings Projection 27-29	Earnings Growth 27-29	Dividend Growth 27-29	Operating Income	Current Assets	PP & E Gross
V L	V L	V L	V L	V L	V L	V L	VL	V L	V L	V L	VL	VL	Yahoo	Yahoo	Yahoo
NMF	8.5%	21.25	4.70	2.45	3.65	31.20	NMF	8.00%	6.85	3.80	5.0%	2.5%	6,893,200,000	10,943,240,000	104,271,240,000
107%	7.50%	7.80	2.15	1.15	1.15	15.30	100%	7.50%	3.25	1.75	15.0%	5.5%	4,250,000,000	2,542,000,000	59,372,000,000
92%	14.5%	38.25	6.75	5.50	3.96	29.55	72%	18.50%	10.00	8.00	13.5%	3.5%	4,230,000,000	3,108,000,000	38,454,000,000
111%	9.0%	17.50	4.50	2.90	2.76	31.55	95%	9.00%	6.00	4.10	10.0%	3.0%	1,842,240,000	2,001,080,000	15,412,040,000
85%	14.0%	11.80	5.75	3.60	2.90	24.55	81%	14.50%	7.10	4.60	12.0%	5.0%	5,209,800,000	8,642,720,000	90,949,960,000
94%	18.9%	9.90	4.35	2.25	1.90	9.65	84%	23.50%	5.45	2.75	10.0%	3.5%	4,182,000,000	4,513,000,000	51,842,000,000
98%	12.1%						average		86%		6.44				
	10.8%						Median		85%		6.43				
	11.5%						Harmonic mean		84%		5.74				

Balance Sheet			Cash Flow Statement	Other Financials	
Intangibles (excl. GW)	Current Liabilities	Long Term Debt Less Current Maturities	Depreciation & Amortization	Carrying Value Debt	Fair Value Debt
Yahoo	Yahoo	Yahoo	Yahoo	10-K	10-K
2,688,120,000	13,250,600,000	56,783,400,000	3,505,880,000	61,712,000,000	59,356,000,000
1,957,000,000	7,221,000,000	28,067,000,000	2,250,000,000	30,063,000,000	29,317,000,000
1,316,000,000	3,452,000,000	21,183,000,000	769,000,000	21,700,000,000	21,400,000,000
1,150,640,000	2,447,960,000	7,485,240,000	503,880,000	7,979,240,000	7,591,640,000
-	8,980,920,000	45,799,880,000	2,111,280,000	40,214,640,000	40,139,400,000
7,130,000,000	5,830,000,000	23,376,000,000	2,071,000,000	22,554,000,000	21,569,000,000

STOCK PRICE

Washington State Department of Revenue

2024 Assessment Year

Pipeline Industry

42.15
2023 Year End

Enbridge Inc	enb.to							
Date	Open	High	Low	Close	Adj. Close*	Volume		
29-Dec-23	47.8	47.81	47.51	47.7	46.76	3,260,000		46.76
Kinder Morgan Energy	kmi							
Date	Open	High	Low	Close	Adj. Close*	Volume		
29-Dec-23	17.7	17.7	17.57	17.64	17.35	9,809,900		17.35
ONEOK Inc	oke							
Date	Open	High	Low	Close	Adj. Close*	Volume		
29-Dec-23	70.71	70.71	70.14	70.22	69.23	2,244,900		69.23
Pembina Pipeline Corp	ppl.to							
Date	Open	High	Low	Close	Adj. Close*	Volume		
29-Dec-23	45.63	45.65	45.37	45.62	45.62	1,035,700		45.62
TransCanada Corp	trp							
Date	Open	High	Low	Close	Adj. Close*	Volume		
29-Dec-23	39.15	39.2	38.91	39.09	39.09	3,467,700		39.09
Williams Cos	wmb							
Date	Open	High	Low	Close	Adj. Close*	Volume		
29-Dec-23	35.03	35.03	34.74	34.83	34.83	3,686,500		34.83

Source:

finance.yahoo.com

Historical Stock Quotes

IMPLIED PREMIUMS FOR US MARKET

These implied premiums are calculated using the S&P 500.

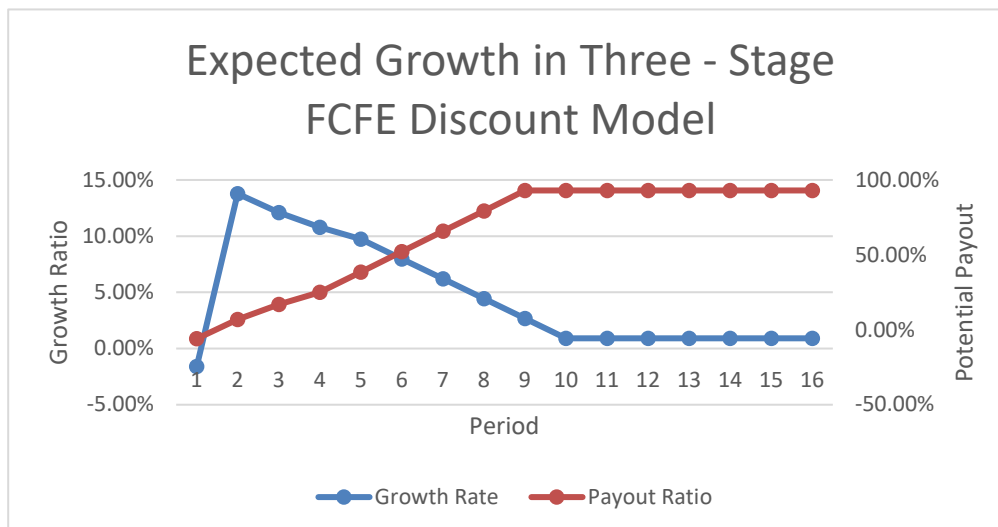
Year	Earnings Yield	Dividend Yield	S&P 500	Earnings*	Dividends*	Trends + Buyback	Change in Earnings	Change in Dividends	T.Bill Rate	T.Bond Rate	Bond-Bill	Boothed Growth	Premium	Real Growth	Real Premium	Implied Premium	ERP/Riskfree
1980	11.04%	4.74%	135.76	14.99	6.44		3.01%	7.81%	11.24%	12.43%	1.19%	11.01%	5.03%		5.03%		0.40
1981	12.39%	5.57%	122.55	15.18	6.83		1.31%	6.08%	14.71%	13.98%	-0.73%	11.42%	5.73%		5.73%		0.41
1982	9.83%	4.93%	140.64	13.82	6.93		-8.95%	1.58%	10.54%	10.47%	-0.07%	7.96%	4.90%		4.90%		0.47
1983	8.06%	4.32%	164.93	13.29	7.12		-3.84%	2.76%	8.80%	11.80%	3.00%	9.09%	4.31%		4.31%		0.37
1984	10.07%	4.68%	167.24	16.84	7.83		26.69%	9.85%	9.85%	11.51%	1.66%	11.02%	5.11%		5.11%		0.44
1985	7.42%	3.88%	211.28	15.68	8.20		-6.91%	4.74%	7.72%	8.99%	1.27%	7.89%	4.03%	6.75%	3.84%		0.43
1986	5.96%	3.38%	242.17	14.43	8.19		-7.93%	-0.15%	6.16%	7.22%	1.06%	5.54%	3.36%	6.96%	3.58%		0.50
1987	6.49%	3.71%	247.08	16.04	9.17		11.10%	11.99%	5.47%	8.86%	3.39%	9.66%	4.18%	8.58%	3.99%		0.45
1988	8.20%	3.68%	277.72	24.12	10.22		50.42%	11.49%	6.35%	9.14%	2.79%	9.76%	4.12%	7.67%	3.77%		0.41
1989	6.80%	3.32%	353.4	24.32	11.73		0.83%	14.80%	8.37%	7.93%	-0.44%	9.58%	3.85%	7.46%	3.51%		0.44
1990	6.58%	3.74%	330.22	22.65	12.35		-8.87%	5.26%	7.81%	8.07%	0.26%	7.39%	3.92%	7.19%	3.89%		0.48
1991	4.58%	3.11%	417.09	19.30	12.97		-14.79%	5.03%	7.00%	6.70%	-0.30%	6.34%	3.27%	7.81%	3.48%		0.52
1992	4.16%	2.90%	435.71	20.87	12.64		8.13%	-2.59%	5.30%	6.68%	1.38%	4.67%	2.83%	9.83%	3.55%		0.53
1993	4.25%	2.72%	466.45	26.90	12.69		28.89%	0.41%	3.50%	5.79%	2.29%	4.73%	2.74%	8.00%	3.17%		0.55
1994	5.89%	2.91%	459.27	31.75	13.36		18.03%	5.34%	5.00%	7.82%	2.82%	7.23%	3.06%	7.17%	3.55%		0.45
1995	5.74%	2.30%	615.93	37.70	14.17		18.74%	6.00%	3.50%	5.57%	2.07%	5.65%	2.44%	6.50%	3.29%		0.59
1996	4.83%	2.01%	740.74	40.63	14.89		7.77%	5.10%	5.00%	6.41%	1.41%	6.13%	2.11%	7.92%	3.20%		0.50
1997	4.08%	1.60%	970.43	44.09	15.52		8.52%	4.25%	5.35%	5.74%	0.39%	5.45%	1.67%	8.00%	2.73%		0.48
1998	3.11%	1.32%	1229.23	44.27	16.20		0.41%	4.37%	4.33%	4.65%	0.32%	4.60%	1.38%	7.20%	2.26%		0.49
1999	3.07%	1.14%	1469.25	51.68	16.71		16.74%	3.16%	5.37%	6.44%	1.07%	5.75%	1.20%	12.50%	2.05%		0.32
2000	3.94%	1.23%	1320.28	56.13	16.27		8.61%	-2.65%	5.73%	5.11%	-0.62%	3.71%	1.65%	12.00%	2.87%		0.56
2001	3.85%	1.37%	1148.09	38.85	15.74	30.08	-30.79%	-3.24%	1.80%	5.05%	3.25%	3.56%	1.73%	10.30%	3.62%	2.91%	0.72
2002	5.23%	1.83%	879.82	46.04	16.08	29.83	18.51%	2.15%	1.20%	3.81%	2.61%	3.57%	2.29%	8.00%	4.10%	4.73%	1.08
2003	4.87%	1.61%	1111.91	54.69	17.88	31.58	18.79%	11.19%	1.00%	4.25%	3.25%	5.35%	2.12%	11.00%	3.69%	4.74%	0.87
2004	5.58%	1.60%	1211.92	67.68	19.407	40.60	23.75%	8.54%	2.18%	4.22%	2.04%	4.90%	2.02%	8.50%	3.65%	4.86%	0.86
2005	5.47%	1.79%	1248.29	76.45	22.38	61.17	12.96%	15.32%	4.31%	4.39%	0.08%	6.16%	2.20%	8.00%	4.08%	5.22%	0.93
2006	6.18%	1.77%	1418.3	87.72	25.05	73.16	14.74%	11.93%	4.88%	4.70%	-0.18%	5.93%	1.97%	12.50%	4.16%	6.12%	0.89
2007	5.62%	1.89%	1468.36	82.54	27.73	95.36	-5.91%	10.70%	3.31%	4.02%	0.71%	5.03%	2.06%	5.00%	4.37%	4.59%	1.09
2008	7.24%	3.11%	903.25	65.39	28.05	67.52	-20.78%	1.15%	1.59%	2.21%	0.62%	2.11%	4.05%	4.00%	6.43%	6.92%	2.91
2009	5.35%	2.00%	1115.10	59.65	22.31	37.43	-8.78%	-20.46%	0.14%	3.84%	3.70%	0.28%	2.60%	7.20%	4.36%	4.64%	1.14
2010	6.65%	1.84%	1257.64	83.66	23.12	55.53	40.25%	3.63%	0.13%	3.29%	3.16%	3.33%	2.24%	6.95%	5.20%	6.09%	1.58
2011	7.72%	2.07%	1257.60	97.05	26.02	71.28	16.01%	12.54%	0.03%	1.88%	1.85%	2.75%	2.71%	7.18%	6.01%	8.34%	3.20
2012	7.18%	2.13%	1426.19	102.47	30.44	75.90	5.58%	16.99%	0.05%	1.76%	1.71%	2.93%	2.47%	5.27%	5.78%	7.30%	3.28
2013	5.81%	1.96%	1848.36	107.45	36.28	88.13	4.86%	19.19%	0.07%	3.04%	2.97%	5.01%	2.03%	4.28%	4.96%	4.99%	1.63
2014	5.49%	1.92%	2058.90	113.01	39.44	101.98	5.17%	8.71%	0.05%	2.17%	2.12%	2.77%	2.24%	5.58%	5.78%	5.48%	2.66
2015	5.20%	2.11%	2043.94	106.32	43.16	106.10	-5.92%	9.43%	0.21%	2.27%	2.06%	2.96%	2.46%	5.51%	6.12%	5.16%	2.70
2016	4.86%	2.01%	2238.83	108.86	45.03	108.67	2.39%	4.33%	0.51%	2.45%	1.94%	2.64%	2.41%	5.54%	5.69%	4.50%	2.32
2017	4.67%	1.86%	2673.61	124.94	49.73	108.28	14.77%	10.44%	1.39%	2.41%	1.02%	3.22%	2.36%	7.05%	5.08%	4.75%	2.11
2018	5.92%	2.14%	2506.85	148.34	53.61	136.65	18.73%	7.80%	2.37%	2.68%	0.31%	3.24%	2.50%	4.12%	5.96%	5.55%	2.22
2019	5.03%	1.82%	3230.78	162.35	58.80	150.50	9.44%	9.68%	1.55%	1.92%	0.37%	2.57%		3.96%	5.20%	5.06%	2.71
2020	3.68%	0.02	3756.07	138.12	56.70	12778.00%	-14.92%	-3.57%	0.09%	0.93%	0.84%	0.74%	1.65%	5.42%	4.72%	4.94%	5.08
2021	4.33%	1.24%	4766.18	206.38	59.20	147.24	47.67%	4.41%	0.06%	1.51%	1.45%	1.71%	1.72%	6.47%	4.24%	4.90%	2.81
2022	5.72%	1.78%	3839.50	219.49	68.34	181.99	6.35%	15.44%	4.42%	3.88%	-0.54%	5.59%	2.16%	6.41%	5.94%	5.11%	1.53
2023	4.61%	1.47%	4769.83	219.7	70.3	164.25	0.10%	2.87%	5.20%	3.88%	-1.32%	3.73%	1.97%	8.74%	4.60%	4.57%	1.19

Three Stage Free Cash Flow to Equity Discount Model

Company **Enbridge Inc** 3.93% GDP
 Ticker **enb.to** 15.0 Industry P/E use median
 93.0% Target Dividend Payout Ratio
 13.0% Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		-12.36%	112.36%	2.49			(46.76)
	1	-1.61%	105.97%	-5.97%	2.45	(0.15)		-0.15
	2	13.78%	93.14%	6.86%	2.79	0.19		0.19
Stage 1	3	12.11%	83.08%	16.92%	3.13	0.53		0.53
	4	10.80%	74.98%	25.02%	3.46	0.87		0.87
	5	9.75%	61.38%	38.62%	3.80	1.47		1.47
	6	7.98%	47.79%	52.21%	4.10	2.14		2.14
	7	6.21%	34.19%	65.81%	4.36	2.87		2.87
Stage 2	8	4.44%	20.60%	79.40%	4.55	3.61		3.61
	9	2.68%	7.00%	93.00%	4.67	4.35		4.35
	10	0.91%	7.00%	93.00%	4.72	4.39	71.39	75.77
Stage 3	11+	0.91%	7.00%	93.00%	4.76	4.43		

K_e = 7.39%

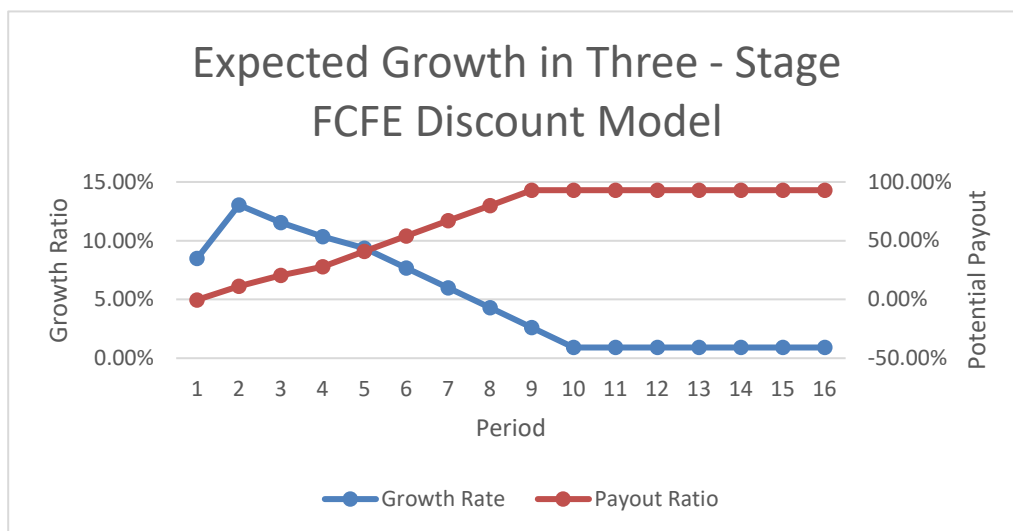


Three Stage Free Cash Flow to Equity Discount Model

Company **Kinder Morgan** 3.93% GDP
 Ticker **kmi** 15.0 Industry P/E use median
 93.0% Target Dividend Payout Ratio
 13.0% Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		65.31%	34.69%	1.06			(17.35)
	1	8.49%	100.33%	-0.33%	1.15	(0.00)		0.00
	2	13.04%	88.76%	11.24%	1.30	0.15		0.15
Stage 1	3	11.54%	79.58%	20.42%	1.45	0.30		0.30
	4	10.34%	72.12%	27.88%	1.60	0.45		0.45
	5	9.38%	59.09%	40.91%	1.75	0.72		0.72
	6	7.68%	46.07%	53.93%	1.88	1.02		1.02
	7	5.99%	33.05%	66.95%	2.00	1.34		1.34
Stage 2	8	4.30%	20.02%	79.98%	2.08	1.67		1.67
	9	2.60%	7.00%	93.00%	2.14	1.99		1.99
	10	0.91%	7.00%	93.00%	2.16	2.01	32.65	34.65
Stage 3	11+	0.91%	7.00%	93.00%	2.18	2.02		

$K_e = 9.99%$

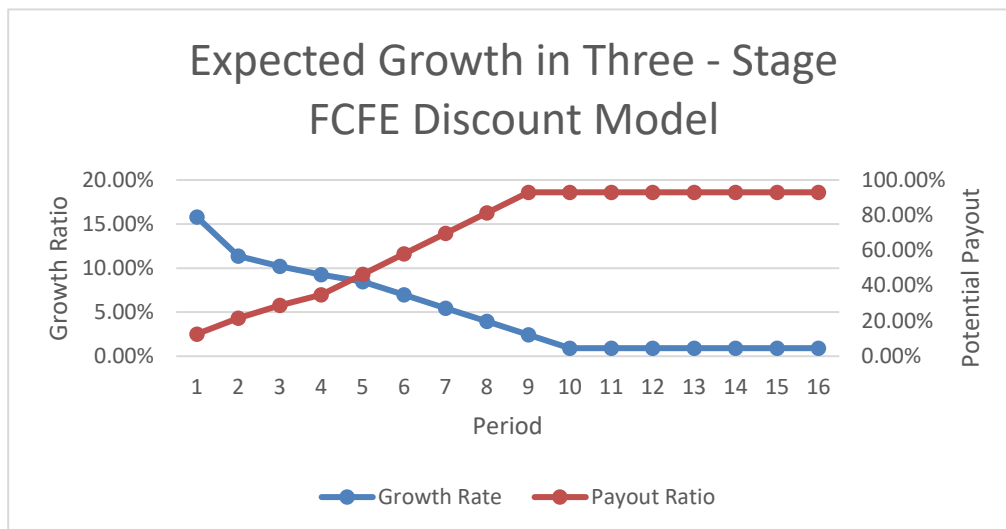


Three Stage Free Cash Flow to Equity Discount Model

Company **ONEOK Inc** 3.93% GDP
 Ticker **oke** 15.0 Industry P/E use median
 93.0% Target Dividend Payout Ratio
 13.0% Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		121.46%	-21.46%	4.75			(69.23)
Stage 1	1	15.79%	87.41%	12.59%	5.50	0.69		0.69
	2	11.36%	78.49%	21.51%	6.13	1.32		1.32
	3	10.20%	71.23%	28.77%	6.75	1.94		1.94
	4	9.26%	65.19%	34.81%	7.38	2.57		2.57
	5	8.47%	53.55%	46.45%	8.00	3.72		3.72
Stage 2	6	6.96%	41.91%	58.09%	8.56	4.97		4.97
	7	5.45%	30.28%	69.72%	9.02	6.29		6.29
	8	3.94%	18.64%	81.36%	9.38	7.63		7.63
	9	2.42%	7.00%	93.00%	9.61	8.93		8.93
	10	0.91%	7.00%	93.00%	9.69	9.01	146.72	155.73
Stage 3	11+	0.91%	7.00%	93.00%	9.78	9.10		

Ke = 11.89%

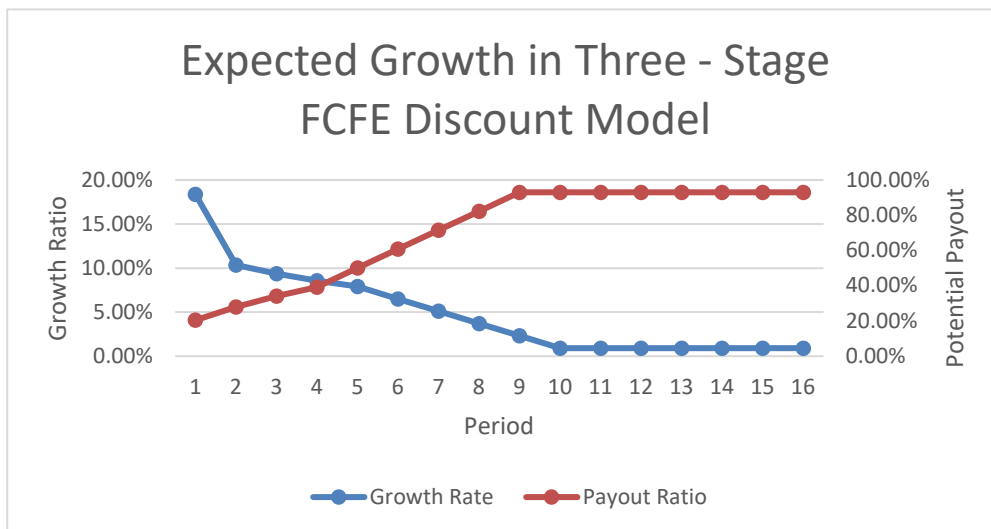


Three Stage Free Cash Flow to Equity Discount Model

Company **Pembina Pipelir** 3.93% GDP
 Ticker **ppl.to** 15.0 Industry P/E use median
 93.0% Target Dividend Payout Ratio
 13.0% Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		141.29%	-41.29%	2.45			(45.62)
Stage 1	1	18.37%	79.58%	20.42%	2.90	0.59		0.59
	2	10.34%	72.12%	27.88%	3.20	0.89		0.89
	3	9.38%	65.93%	34.07%	3.50	1.19		1.19
	4	8.57%	60.73%	39.27%	3.80	1.49		1.49
	5	7.89%	49.98%	50.02%	4.10	2.05		2.05
Stage 2	6	6.50%	39.24%	60.76%	4.37	2.65		2.65
	7	5.10%	28.49%	71.51%	4.59	3.28		3.28
	8	3.70%	17.75%	82.25%	4.76	3.91		3.91
	9	2.31%	7.00%	93.00%	4.87	4.53		4.53
	10	0.91%	7.00%	93.00%	4.91	4.57	74.37	78.94
Stage 3	11+	0.91%	7.00%	93.00%	4.96	4.61		

$K_e = 8.93\%$

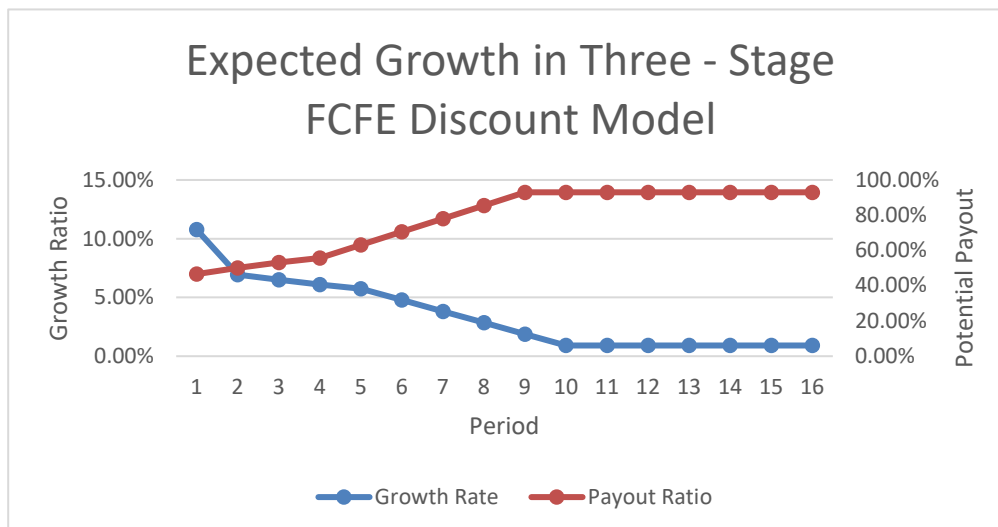


Three Stage Free Cash Flow to Equity Discount Model

Company **TC Energy Corp** **3.93%** GDP
 Ticker **trp** **15.0** Industry P/E use median
93.0% Target Dividend Payout Ratio
13.0% Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		82.84%	17.16%	3.25			(39.09)
	1	10.77%	53.42%	46.58%	3.60	1.68		1.68
	2	6.94%	49.95%	50.05%	3.85	1.93		1.93
Stage 1	3	6.49%	46.90%	53.10%	4.10	2.18		2.18
	4	6.10%	44.21%	55.79%	4.35	2.43		2.43
	5	5.75%	36.77%	63.23%	4.60	2.91		2.91
	6	4.78%	29.33%	70.67%	4.82	3.41		3.41
	7	3.81%	21.88%	78.12%	5.00	3.91		3.91
Stage 2	8	2.84%	14.44%	85.56%	5.15	4.40		4.40
	9	1.88%	7.00%	93.00%	5.24	4.88		4.88
	10	0.91%	7.00%	93.00%	5.29	4.92	80.08	85.00
Stage 3	11+	0.91%	7.00%	93.00%	5.34	4.96		

$K_e = 13.03\%$



Three Stage Free Cash Flow to Equity Discount Model

Company **The Williams Co** 3.93% GDP
 Ticker **wmb** 15.0 Industry P/E use median
 93.0% Target Dividend Payout Ratio
 13.0% Target ROE

	Year	Growth Rate	Reinvestment Rate	Payout Ratio	Earnings	FCFE	Terminal Value	Cash Flow
Historic	0		136.93%	-36.93%	1.91			(34.83)
Stage 1	1	17.80%	42.74%	57.26%	2.25	1.29		1.29
	2	5.56%	40.49%	59.51%	2.38	1.41		1.41
	3	5.26%	38.46%	61.54%	2.50	1.54		1.54
	4	5.00%	36.63%	63.37%	2.63	1.66		1.66
	5	4.76%	30.70%	69.30%	2.75	1.91		1.91
Stage 2	6	3.99%	24.78%	75.22%	2.86	2.15		2.15
	7	3.22%	18.85%	81.15%	2.95	2.40		2.40
	8	2.45%	12.93%	87.07%	3.02	2.63		2.63
	9	1.68%	7.00%	93.00%	3.08	2.86		2.86
	10	0.91%	7.00%	93.00%	3.10	2.89	46.97	49.85
Stage 3	11+	0.91%	7.00%	93.00%	3.13	2.91		

$K_e = 8.01\%$

