

Security & Industry Analysis: Western Refining

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Overview of Western Refining

Western Refining (NYSE: WNR) is an independent oil refiner and marketer, with locations in the southwestern, western, and midwestern United States. The company produces 246,000 barrels per day of high-value light products such as gasoline, diesel and jet fuel (About Us - Western Refining, n.d.).

This company operates under four business segments, which includes the Refining Group, Retail Group, WNRL, and NTI (Forbes, 2016). The Refining Group owns and operates three refineries, which supplies a various range of fuels, lubricants, and automotive chemicals to its customers. The Retail group currently operates approximately 260 convenience store and gas stations, marketed under the brands of Giant and Howdy's, with locations in Arizona, Colorado, New Mexico, and Texas. This group also operates approximately 169 convenience stores and 114 franchised convenience stores under SuperAmerica, with locations in Minnesota and Wisconsin (About Us - Western Refining, n.d). WNRL is the segment that operates and provides the terminal, storage, and transportation assets primarily to the refining portion of the company. Lastly, the NTI segment owns and operates the assets for refining and transportation, while also operating the retail assets and supporting the franchise convenience stores (Forbes, 2016).

Western Refining was founded in 1997 by Paul L. Foster, with its headquarters located in El Paso, Texas. As of 12/31/2015, there are approximately 7,347 employees working in the refineries located in Texas, New Mexico, and Minnesota. This also includes those employees working in the retail division across the southwestern United States, with a reported net income of \$262,801,000 (Mergent, n.d.).

Table 1

*Revenue by Business Segment (Mergent, n.d.)***Business Analysis**

Report Date	Revenues			12/31/2015	12/31/2014	12/31/2013
	12/31/2015	12/31/2014	12/31/2013			
Currency	USD	USD	USD	USD	USD	USD
Scale	-	-	-	-	-	-
Refining Group	3,856,135,000	6,151,208,000	4,315,432,000	-	-	-
Wholesale Group	-	-	3,926,042,000	-	-	-
Northern Tier Energy LP	2,954,150,000	5,134,618,000	686,824,000	-	-	-
Western Refining Logistic, LP	1,813,543,000	2,490,313,000	1,743,000	-	-	-
Retail Group	1,163,208,000	1,376,328,000	1,156,029,000	-	-	-
Revenues Total	-	-	-	9,787,036,000	15,152,467,000	10,086,070,000
Operating Income Total	-	-	-	1,008,083,000	1,173,446,000	649,720,000

Table 2

*Breakdown of Assets (Yahoo Finance, n.d.)***Balance Sheet** All numbers in thousands

Period Ending	12/31/2015	12/31/2014	12/31/2013
Current Assets			
Cash And Cash Equivalents	772,502	431,159	468,070
Short Term Investments	-	-	-
Net Receivables	359,237	467,527	599,930
Inventory	547,538	629,237	557,388
Other Current Assets	242,041	240,540	222,348
Total Current Assets	1,922,218	1,768,463	1,847,736
Long Term Investments	97,513	96,080	101,560
Property Plant and Equipment	2,305,171	2,153,189	2,125,029
Goodwill	1,289,443	1,289,443	1,297,043
Intangible Assets	84,045	85,952	78,008
Accumulated Amortization	-	-	-
Other Assets	134,103	240,059	63,409
Deferred Long Term Asset Charges	-	-	-
Total Assets	5,833,393	5,642,186	5,512,965

Macro-Economic Analysis

Domestic Economic Conditions

Based on the reports from the twelve Federal Reserve Districts it is apparent that the United States economic activity has continued to grow. While it is reported from New York that they have remained constant, showing no overall change in economic activity from the period of August - October, it has been reported that growth has improved around the districts of St. Louis, Kansas City, and Dallas. This is a positive for Western Refining as they are located in and around these districts. When it comes to the employment sector of the national economy there is some expansion, mostly apparent in the more northern and central areas of the United States. However, in the districts around Western Refining's locations employment is stable, with the Dallas district reporting a decrease in layoffs in the energy sector. The reports on manufacturing, consumer spending, and tourism were mixed across the nation. Overall in the more western/southwestern districts manufacturing has increased, while consumer spending and tourism seem to be constant, with little change anticipated. This trend could have an impact on the oil and gas sector, which has continued to stabilize over the period, creating a favorable scenario for Western Refining. The district of Dallas reported that the demand for oilfield services show to be weak, however they remain confident that 2017 will show a greater increase in the agricultural sector than it did in 2016 (Federal Reserve, 2016). Overall, the United States economy is showing signs of continued growth and expansion at a modest pace.

Global Economic Conditions

Table 3

Economic Outlook Projections (IMF, 2016).

(Percent change unless noted otherwise)

	YEAR OVER YEAR						Q4 OVER Q4			
	2014	Estimates		Projections		Difference from April 2016 WEO Projections 1/		2015	Projections	
		2015	2016	2017	2016	2017	2016		2017	
World Output 2/	3.4	3.1	3.1	3.4	-0.1	-0.1	3.0	3.2	3.5	
Advanced Economies	1.9	1.9	1.8	1.8	-0.1	-0.2	1.8	1.8	1.9	
United States	2.4	2.4	2.2	2.5	-0.2	0.0	2.0	2.5	2.3	
Mexico	2.2	2.5	2.5	2.6	0.1	0.0	2.4	2.4	2.8	

Based on monetary models from the World Economic Outlook, output growth exceeded expectations in emerging and developing economies, while following suit in advanced economies for the first quarter of 2016. During this time European growth outperformed U.S. growth, which had an overall weak turnout. Additionally, productivity growth in advanced economies continued at a stagnant pace. However, the financial and oil industries showed continuous recovery for 2016. If this trend continues it could have an overall positive effect on business for Western Refining. Not only is growth apparent domestically for Western Refining, but based on forecasting models the outlook for emerging economies is on the uprise for global growth as well. This has positive implications for Western Refining as they have business connections in Chihuahua, Mexico. On the other hand, the Brexit vote is causing controversy in the global economy. It insinuates an increased level of uncertainty in economic, political, and institutional sectors, and is expected to have negative macroeconomic effects. While overall projections for the future global economy are uncertain, economic activity so far in 2016 has turned out better than expected (IMF, 2016).

Oil and Gas Industry Analysis

The oil and energy industry is very large. According to the Department of Energy (DOE) fossil fuel, coal, oil and natural gas make up more than 85 percent of the energy consumed in the U.S. as of 2008. In recent years, the oil and gas industry has seen a fluctuation in prices. In 2015 prices dropped in the oil and gas industry and many companies faced at least a 50 percent drop in revenues. There were many causes that illustrate the decline of oil and gas. For instance, earnings and stock prices declined dramatically for all integrated oil companies, upstream independents, oil field service companies, and midstream companies. According to NASDAQ, the price of oil has been very volatile in 2016 with prices recovering from a twelve year low of \$26.21 per barrel in February, to \$50 per barrel in early June, and then dropping to an estimated \$40 per barrel thereafter. This also affected Western Refining (WNR) whose stock began to fall in December 2015 on the news of the abolition of crude oil export ban in the United States. The news raised fears of a fall in US refineries' refining margins. Projecting into the future there are positive developments that could help the industry evolve to a better place.

Global Oil & Gas industry Overview

Oil is facing the heat on several other fronts as well. Perhaps most important pertains to the mounting worries about China's crude demand. Global demand for natural gas is expected to have risen by 2.2 percent per year by the end of 2019, according to the International Energy Agency. Yet although natural gas will likely continue to represent an increased share of the global energy mix, a share growing by 2.4 percent annually until 2018, analysts expect production to exceed demand in the short term.

Firms Position

Jeff Stevens, CEO, said, "Western had a successful 2015 despite a volatile crude oil pricing environment and challenging fourth quarter. As a result, Western recorded full year 2015 net income attributable to Western Refining, Inc. of \$406.8 million, or \$4.28 per diluted share compared to full year 2014 net income of \$559.9 million, or \$5.61 per diluted share. Western Refining (WNR) reported net income (loss) attributed to non-controlling interests for the three and twelve months ended December 31, 2015 and 2014, consisted of income from NTI of \$(11.0) million, \$186.5 million, \$7.1 million and \$131.9 million, respectively. Net income attributed to non-controlling interest for the three and twelve months ended December 31, 2015 and 2014, consisted of income from WNRL of \$5.0 million, \$21.2 million, \$6.4 million and \$18.2 million, respectively. In addition, Expanded logistics assets in Delaware Basin and Four Corners, resulting in highly integrated crude oil distribution network. The company was able to \$234 million to shareholders through dividends and share repurchases in 2015.

Economic Advantages

Competition/ Northern Tier Merger

Western Refining is a small refining company based in the southwest. This industry is highly competitive both on petroleum refining and marketing. An increase in competition in areas they sell their products could affect sales and profitability. Earlier this year, Western Refining merged with Northern Tier, a refining company based in the Midwest. This merge provided Western Refining opportunity to expand its operations to the Midwest. According to Western Refining CEO Jeff Stevens, "this geographic mix gives Western Refining a significant diversity both in terms of crude oil-basin-access and product distribution areas, and also results in a more simplified corporate structure." (CSP,2016)

Jobs

Western Refining has created many jobs in the southwest and Midwest. They operate more than 260 convenience stores, gas stations, bakery and commissary. After the northern Tier merge, they added an additional 400 convenience stores.

Financial statements**Western Refining, Inc. (WNR)**

NYSE - NYSE Real Time Price. Currency in USD

All numbers in thousands

Income Statement

Revenue	12/31/2015	12/31/2014	12/31/2013
Total Revenue	9,787,036	15,153,573	10,086,070
Cost of Revenue	8,426,324	13,619,066	9,264,307
Gross Profit	1,360,712	1,534,507	821,763
Operating Expenses			
Research Development	-	-	-
Selling General and Administrative	225,245	238,898	137,031
Non Recurring	-	-	-
Others	205,291	190,566	117,848

Total Operating Expenses	-	-	-
Operating Income or Loss	930,125	1,096,513	571,873

Income from Continuing Operations

Total Other Income/Expenses Net	13,813	-5,305	-38,824
Earnings Before Interest and Taxes	943,989	1,099,738	528,060
Interest Expense	105,603	97,062	74,581
Income Before Tax	838,386	1,002,676	453,479
Income Tax Expense	223,955	292,604	153,925
Minority Interest	1,646,609	1,667,936	1,676,535
Net Income from Continuing Ops	406,756	559,917	229,221

Non-recurring Events

Discontinued Operations	-	-	-
Extraordinary Items	-	-	-
Effect of Accounting Changes	-	-	-
Other Items	-	-	-

Net Income

Net Income	406,756	559,926	275,994
Preferred Stock and Other	-	-	-
Adjustments			
Net Income Applicable to Common	406,756	559,926	275,994
Shares			

Cash Flow

Period Ending **12/31/2015** **12/31/2014** **12/31/201**

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Net Income	406,756	559,926	275,994
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Operating Activities, Cash Flows Provided by or Used in

Depreciation	211,741	205,062	139,823
Adjustments to Net Income	22,036	-97,240	-7,038
Changes in Accounts Receivables	108,604	132,107	-129,531
Changes in Liabilities	-169,443	-186,553	127,904
Changes in Inventories	81,699	-71,849	37,803
Changes in Other Operating Activities	-25,985	46,034	-27,362
Total Cash Flow from Operating Activities	843,083	737,633	441,153

Investing Activities, Cash Flows Provided by or Used in

	-290,863	-223,271	-205,677
Capital Expenditures			
Investments	-	7,480	1,140
Other Cash flows from Investing Activities	99,017	-165,073	-691,348
Total Cash Flows from Investing Activities	-191,846	-380,864	-895,885

Financing Activities, Cash Flows Provided by or Used in

	-367,577	-467,383	-81,064
Dividends Paid			
Sale Purchase of Stock	-105,000	-259,222	70,305
Net Borrowings	168,632	341,430	524,274
Other Cash Flows from Financing Activities	-	-	-
Total Cash Flows from Financing Activities	-309,894	-393,680	468,835

Activities

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Effect of Exchange Rate Changes

Change in Cash and Cash Equivalents	341,343	-36,911	14,103
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Balance Sheet

Period Ending	12/31/2015	12/31/2014	12/31/2013
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Current Assets

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Goodwill	1,289,443	1,289,443	1,297,043
Intangible Assets	84,945	85,952	78,098
Accumulated Amortization	-	-	-
Other Assets	134,103	249,059	63,499
Deferred Long Term Asset Charges	-	-	-
Total Assets	5,833,393	5,642,186	5,512,965

Current Liabilities

Accounts Payable	802,352	950,252	1,185,427
Short/Current Long Term Debt	5,500	5,500	213,642

Other Current Liabilities	-	-	-
Total Current Liabilities	807,852	955,752	1,399,069
Long Term Debt	1,698,126	1,502,154	1,197,875
Other Liabilities	68,595	41,827	92,945
Deferred Long Term Liability Charges	312,914	354,809	252,489
Minority Interest	1,646,609	1,667,936	1,676,535
Negative Goodwill	-	-	-
Total Liabilities	2,887,487	2,854,542	2,942,378
Stockholders' Equity			
Misc. Stocks Options Warrants	-	-	-
Redeemable Preferred Stock	-	-	-
Preferred Stock	-	-	-
Common Stock	1,028	1,026	918
Retained Earnings	1,167,938	890,393	624,213
Treasury Stock	-363,168	-258,168	-356,554
Capital Surplus	492,848	487,748	625,825
Other Stockholder Equity	651	-1,291	-350
Total Stockholder Equity	1,299,297	1,119,708	894,052
Net Tangible Assets	-75,091	-255,687	-481,089

(Yahoo Finance, 2016).

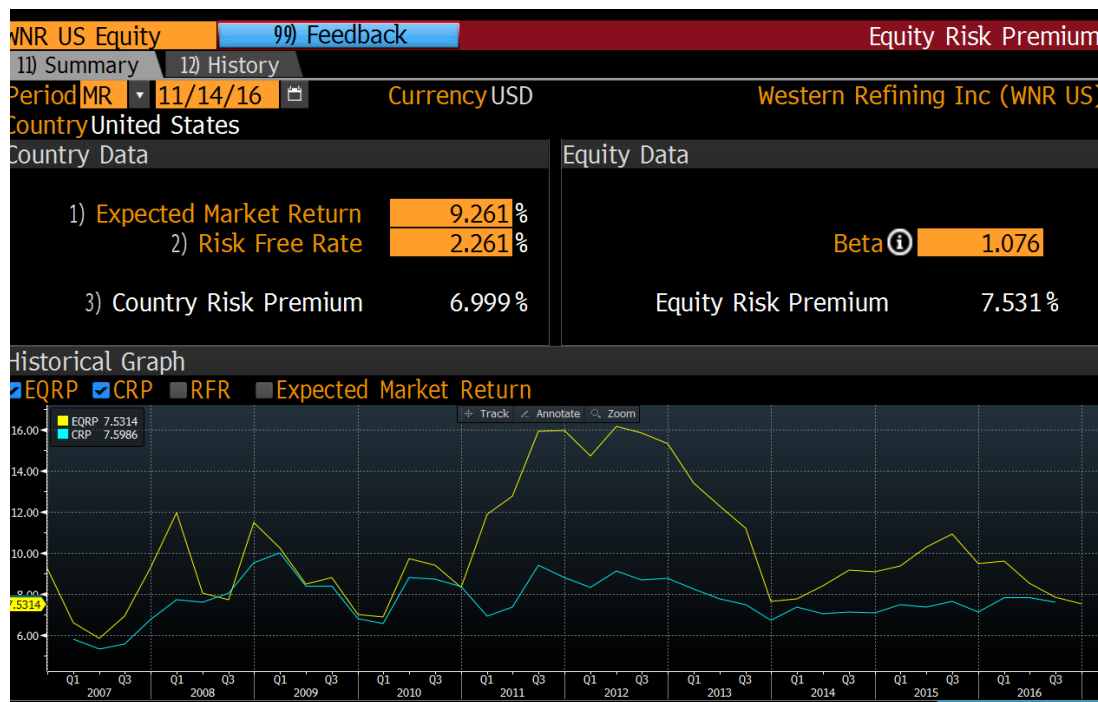
Multiple Valuations: Western Refining

Risk-free Rate

The risk-free rate of 2.261% was determined by using the annual yield of a 10-year US treasury Note received from Bloomberg Terminal.

Figure 1

Western Refining Inc: Equity Risk Premium from Bloomberg Terminal on 11/14/16



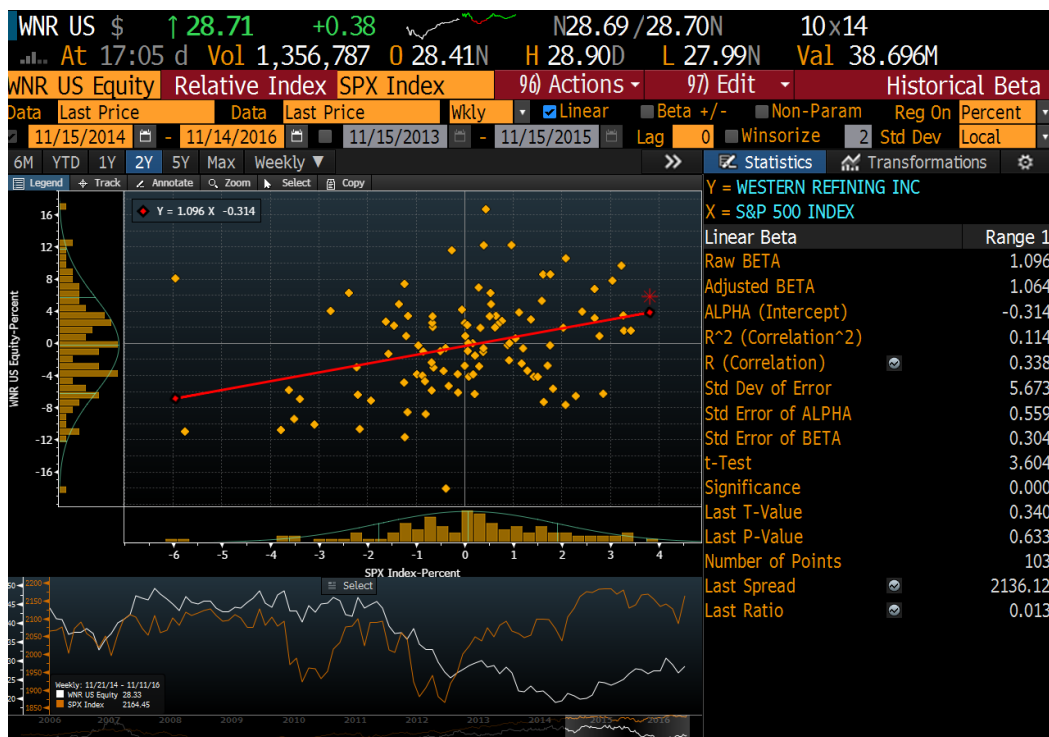
Beta

Beta reflects how risky an asset is compared to overall market risk, and is a function of the volatility of the asset and the market as well as the correlation between the two. Western

Refining (WNR) has a beta of 1.322, because the beta is greater than 1.0 it can be determined that the share price of WNR is more volatile than the general market. (See Fig. 2) In addition, investors will require a higher return. A beta smaller than 1.0 means that the share price for a company is less volatile than the general market and therefore investors will require a lower return.

Figure 2

Western Refining Inc: Historical Beta from Bloomberg Terminal on 11/14/16



Market Risk Premium

The Market Risk Premium is derived from the expected return on the S&P 500 Index. Market Risk Premium is the difference from WNR expected market return of 9.26 percent and the risk-free rate of 2.26 percent, for a market risk premium of 7.00 percent with the S&P 500 being used as a benchmark. From a macroeconomic perspective, the MRP reflects the broader

outlook on the whole economy. Factors influencing investors' views on market risk include outlooks for economic growth, consumer demand, inflation, interest rates, and geopolitical risks.

Required Rate of Return

The required rate of return for Western Refining is calculated to be 9.79 percent. Data from Bloomberg was used to formulate a discount rate using Capital Asset Pricing Model. CAPM states that the expected return on an asset is the risk-free rate plus an MRP that is adjusted, through beta, to reflect the market risk of the asset:

Table 4

Discount Rate Calculations

<i>Discount rate calculations</i>	
<i>Current beta</i>	1.076
<i>Risk-free rate</i>	2.26%
<i>Market risk premium</i>	7.00%
<i>Required rate of return (k)</i>	9.79%

Growth Rate Justification

Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. During the past thirteen years, Western Refining's highest Return on Equity (ROE) is 58.55 percent, with the lowest being -46.75 percent, and a median of 32.12 percent. Western Refining's annualized net income for the quarter that ended in September 2016 was \$154 million. Western Refining's average shareholder equity for the quarter that ended in September 2016 was \$1,664 Mil. Therefore, Western Refining's annualized return on equity for the quarter ending in September 2016 was 9.27 percent. WNR should have a high ROE, as this helps to ensure that there are no structural flaws. According to NASDAQ, ROE should be greater than the top one third of ROE from among the

top 1,500 largest cap stocks, which is 16.09 percent. The ROE for WNR is 9.274 percent, which is not high enough and did not pass their criterion for measuring ROE.

In addition to long term growth, Yahoo Finance reported 52.67 percent for WNR's payout ratio. This determines the sustainability of WNR's dividend payment. GuruFocus concluded WNR's Dividend Payout Ratio ranked higher than 76 percent of the 116 companies in the Marketing Industry. One minus the payout ratio is the formula used to calculate the plowback rate, which equates to a plowback rate of 47.33 percent. WNR'S growth calculated 15.22 percent.

The forecasted growth rate, according to Bloomberg, is 10% during growth years and 5.31% at maturity (Bloomberg). 10% is unusually high for such a company because of the competition in the gas and oil industry. A value of 5.31% is a more appropriate growth rate.

Table 5

*Long-Term Growth Calculations****Long-term Growth Calculations***

<i>ROE=</i>	32.1 7%
<i>b=</i>	47.3 3%
<i>g=</i>	15.2 2%

Dividend Discount model.

Table 6

Dividend Growth Model

<i>Forecasted Growth Rate</i>	10.00%	$g=ROE * b$	17.30%
<i>Dividend</i>	Present Value	Dividend	Present Value
1.52	1.50	1.52	1.50
1.67	1.51	1.78	1.61
1.84	1.51	2.09	1.72
2.02	1.51	2.45	1.83
2.23	1.52	2.88	1.96
2.45	1.52	3.38	2.09
2.69	1.52	3.96	2.24
2.96	1.52	4.65	2.39
3.26	1.53	5.45	2.55
76.56	35.86	128.03	59.97
	49.50		77.87

The above model was used to price the intrinsic value per share for WNR stock. First, the predicted forecast growth of 10 percent from Bloomberg was used. This growth rate was utilized to predict the future dividend prices for WNR, and then discounting them back using the rate of return from CAPM of 9.79 percent. Secondly, the intrinsic value per share was priced by using the estimation of the dividend growth, which is 17.30 percent. Just as before, future dividends were priced and then discounted back using the CAPM rate of return. Both growth rates were applied to a period of nine years. The current stock price is \$36.52, and based on the available data these growth rates are not reasonable, because WNR is facing competition from major oil and gas companies like BP and Shell.

Multi-Stage Growth DDM

The multi-stage growth uses a payout ratio of 45 percent and constant growth of 5.31 percent at maturity (Bloomberg). The payout ratio over the growth years is 75 percent, which when multiplied by EPS provides future dividends over the nine growth years and eight

transitional years. The dividends are then discounted back to the present using CAPM rate of return (9.79) to get the intrinsic value. This intrinsic value per share is more plausible. WNR stock price has never been consistent, with highest price being \$65.16 and the lowest price being \$4.90. This model is more trustworthy than the above model. As mentioned above WNR faces tough competition. This company is overvalued and faces the risk of being acquired by a bigger company.

Multi-Stage Growth Model

Table 7

Multi-Stage Growth Model

Growth Years (9 years)	12/31/2018	2.11	10.00%	1.86	75.00%	1.40	1.15
	12/31/2019	3.11	10.00%	2.05	75.00%	1.54	1.15
	12/31/2020	4.12	10.00%	2.25	75.00%	1.69	1.15
	12/31/2021	5.12	10.00%	2.48	75.00%	1.86	1.15
	12/31/2022	6.12	10.00%	2.73	75.00%	2.05	1.16
	12/31/2023	7.12	10.00%	3.00	75.00%	2.25	1.16
	12/31/2024	8.12	10.00%	3.30	75.00%	2.48	1.16
	12/31/2025	9.12	9.41%	3.61	71.25%	2.57	1.10
	12/31/2026	10.12	8.83%	3.93	67.50%	2.65	1.03
Transitional Years (8 years)	12/31/2027	11.12	8.24%	4.25	63.75%	2.71	0.96
	12/31/2028	12.12	7.65%	4.58	60.00%	2.75	0.89
	12/31/2029	13.12	7.07%	4.90	56.25%	2.76	0.81
	12/31/2030	14.12	6.48%	5.22	52.50%	2.74	0.73
	12/31/2031	15.12	5.89%	5.53	48.75%	2.70	0.66
	12/31/2032	16.12	5.31%	5.82	45.00%	2.62	0.58
	Beginning of Constant Growth (Terminal Value)	12/31/2033	17.12	5.31%	6.13	45.00%	2.76
Intrinsic Value per Share	12/31/2033	17.12				64.79	13.09
							30.76

Multiple Models Approach

Western Refining (WNR) has expected earnings per share of \$1.53, and has a forecasted P/E ratio of 23.93 according to Yahoo Finance. To determine how the company's stock will perform over the next year the expected EPS is multiplied by the forecasted P/E ratio, which

equates to a price of \$36.61. This price is the intrinsic value, found by using expected/forecasted prices.

While the forecasted P/E ratio gives investors a forward look at the stock's value, it does not encompass all the information necessary to undoubtedly evaluate the stock. In order to determine how well the stock is performing it is best to compare it to its industry's performance. To confirm WNR's standing, the S&P 500 Energy Sector was used as a benchmark for comparison. This demonstrates how the sector is performing. Found on GuruFocus, the energy sector data divided by the data found on YCharts for Western Refining will provide the relative P/E ratio, as seen below in the chart for the years 2011-2015.

Table 8

Relative P/E ratio - Energy Sector & Western Refining

Year	S&P 500 Energy Sector	WNR	Relative P/E Ratio
2011	15.57	7.38	0.47
2012	14.68	29.07	1.98
2013	15.70	8.83	0.56
2014	13.70	8.87	0.65
2015	11.00	6.60	0.60

The relative P/E ratio for Western Refining is found by averaging all the relative P/E ratios over the past five years, which is equivalent to 0.85. Since the relative P/E ratio is less than one this demonstrates that WNR's P/E ratio is below the average of its industry. The relative P/E ratio can be used to help derive the forward P/E ratio by multiplying the relative P/E ratio by the benchmark P/E ratio of 24.70, found on Yahoo Finance, to reach a forward P/E ratio of 21.07. This ratio is less than Western Refining's own P/E ratio of 23.93 because WNR appears to be

performing below its industry's average. Not only does the company's forward P/E ratio decrease, but its intrinsic value also decreases from \$36.61 to \$32.23 as well. This value is determined by including the forward P/E ratio that was calculated by using the benchmark and relative ratios. This illustrates that Western Refining is not as valuable as it may appear compared to its industry and its competitors.

Valuations

As stated in previous sections, the intrinsic value \$30.76 figure obtained from multi stage growth dividend model is a useful metric for evaluating the company's value. Our model predicts that the growth rate will remain at 5.31%. Other methods such as the dividend growth model was not appropriate the model lacked a reliable output.

Western Refining Overvalued

As of December 11, 2016, Western Refining is priced at 38.95 USD (Yahoo! Finance). The \$8.19 difference between WNR'S stock price and our calculated intrinsic value represents an overvaluation of approximately 26.63%. Overvaluation inflates the stock's market price and financial strength. Potential investors do not want to overpay for a stock.

WNR is an overvalued stock its price is not justified by its earnings outlook or price/earnings (P/E) ratio, so it is expected to drop in price. In other words, WNR stock price has never been consistent, with highest price being \$65.16 and the lowest price being \$4.90. As mentioned WNR faces tough competition. This company is overvalued and faces the risk of being acquired by a bigger company. According to Value Line, consolidation among small-to-midsized oil refiners is not surprising, as consistently lower margins, coupled with burdensome regulations, are taking a toll on WNR profits. This, in our view, leaves the business with fewer options to

keep operations. In addition, Western Refining (WNR) has a beta of 1.32, because the beta is greater than 1.0 it can be determined that the share price of WNR is more volatile than the general market. Moreover, investors will require a higher return. Western Refining Inc holds several positive signals, but we still don't find these to be enough for a buy-recommendation. At the current level we recommend a hold or accumulate position awaiting further development.

Alternative investment opportunity: Valero Energy Corporation

Valero Energy Corporation would be another option for alternative investment in the oil and gas industry. Valero Energy Corporation is an international manufacturer and marketer of transportation fuels, petrochemical products and power. Their headquarters is located in San Antonio, Texas and are a Fortune 500 company. They produce around 3 million barrels per day, with products available in 44 US states, United Kingdom, Caribbean, Eastern Canada and Ireland (Valero). In addition, they also run 7,000 wholesale stores.

Comparison

Compared to Western Refining, Valero's market cap is 30.78 billion and Western Refining market cap is 4.22 Billion according to Yahoo Finance. Western Refining stock is more volatile with a beta of 1.03 while Valero's stock is less volatile with a beta of 0.83. Although Western Refining excels with a price-earnings ratio of 25.52, while Valero's P/E ratio is only 14.42.

Valero Valuation

The current stock price for Valero is \$68 according to Yahoo Finance. After evaluating Valero current standing, it can be determined that the company is valued correctly. Different

ways are used to value Valero. Using two stage DDM, the company's intrinsic value is \$66.42. This was obtained by using a Bloomberg forecasted dividend growth rate of 2.25% and current dividend payout of \$2.30. This intrinsic value is close to the actual price, with a price difference of \$1.58.

Table 9

Valero's Growth Model

Forecasted Growth Rate	2.25%	g=ROE * b	7.08%		
Dividend	Present Value	Dividend	Present Value		
2.30	2.29	2.30	2.29		
2.35	2.16	2.46	2.26		
2.40	2.04	2.64	2.24		
2.46	1.93	2.82	2.22		
2.51	1.82	3.02	2.19		
2.57	1.72	3.24	2.17		
2.63	1.63	3.47	2.14	Use forecasts on VLO	Year 12/31/2016
2.69	1.54	3.71	2.12	Forward P/E Ratio	13.76
2.75	1.45	3.98	2.10	x Forward EPS	4.94
94.42	49.84	136.65	72.13	P*	67.97
	66.42		91.87	Intrin/share	67.67

Using the historical growth rate, the price is \$1465.20 which is unrealistic. This is most likely because the company's dividend payout increased from \$0.30 in 2011 to \$2.30 in 2016. The other method used to evaluate the company is using ROE and plowback ratio to estimate growth, which is 7.08 percent. Using this rate, we get an intrinsic value of \$91.87 which shows the stock is undervalued. The last method used in valuation is using the P/E ratio. With a forward P/E ratio of 13.76, obtained from Bloomberg, multiplied by the forward EPS of \$4.94 gives an intrinsic value of \$67.67. This is closer to the actual value, which demonstrates that the company is valued correctly.

Valero Energy is a safe company to invest in. Based on the valuations, it is apparent that the company is not overvalued. There is even a possibility that this company might be undervalued,

as one of the models suggests an intrinsic value of \$91.87. According to the analysis, the company will grow by approximately 44.50 percent next year, and 6 percent in the next 5 years (Yahoo Finance). Recently, OPEC among other oil producing countries have decided to cut global oil production. This will create an oil deficit which will drive oil prices up. This is positive news for investors in the industry. A conservative investor would hold Valero's stock as it is well priced, and a risky one would buy more in hopes the price will increase in the future.

Recommendation

After careful evaluation of Western Refining's standing it is apparent that investing in this company would most likely realize more risk than reward at this time. We believe that WNR is overvalued based on our model, in an industry that is currently not showing an increase based on economic conditions. Additionally, Dallas, Texas is currently reporting a weak demand for the oilfield services, with WNR's headquarters located in El Paso, Texas. This weak demand could be detrimental to the company if there is no turnaround. While there are predictions that the economic conditions in Western Refining's locations may increase in the year 2017, there is also the competition to consider.

Western Refining is a small company in a highly competitive industry. With competition from much larger oil and gas companies such as BP, Shell, and Valero, WNR is at a high risk of being acquired by a larger company. This risk can be determined by analyzing the company's condition. WNR has been inconsistent in its pricing with its stock ranging from \$65.16 per share, all the way down to \$4.90 per share. This fluctuation demonstrates the company's instability within its industry. Also, when compared to the benchmark S&P 500 Energy Sector, WNR's relative P/E ratio was averaged at 0.85. Seeing that their relative P/E ratio is less than one, it is

apparent that the company is performing below its industry's average. Not only is the company performing below its industry's average, but it is also apparent that the company is overvalued based on our models. Western Refining's P/E ratio of 23.93, obtained from Yahoo Finance, was found to be higher than the calculated forward ratio of 21.07. Additionally, the intrinsic value for WNR also appears to be higher as the actual is priced at \$36.61 and decreases to \$32.23 after calculation. With a below average position compared to competitors such as Valero, who appear to be performing well in the industry, models suggest that it would more likely be profitable to invest in the competition than in Western Refining.

Overall, with the number of uncertainties in the energy industry itself and the below par performance, it is recommended to not invest in Western Refining at this time. If we do consider investing in the company in the future, it would be best to assess the state of the energy industry at the beginning of the year 2017 to determine if the predictions for the economic conditions uphold. Then another comparison of WNR to the sector and its competitors would be best to determine if the company has increased to be at or above the industry average. This will ensure that we are investing in a company that indicates a promising return, and not one that is at a high risk for loss.

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