Weekly Fundamental Market Report August 6-10, 2018

Market Update

PRODUCTS	8/6/18	8/7/18	8/8/18	8/9/18	8/10/18
WTI Crude Oil	69.01	69.17	66.94	66.81	67.63
Brent Crude Oil	73.75	74.65	72.28	72.07	72.81
Natural Gas	2.86	2.90	2.95	2.96	2.94

- **CME Group**

Headlines

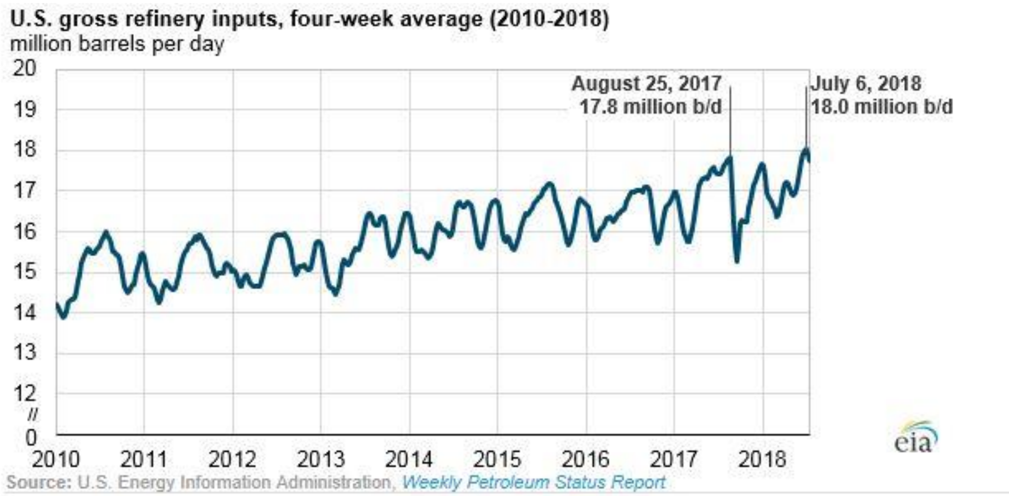
Domestic

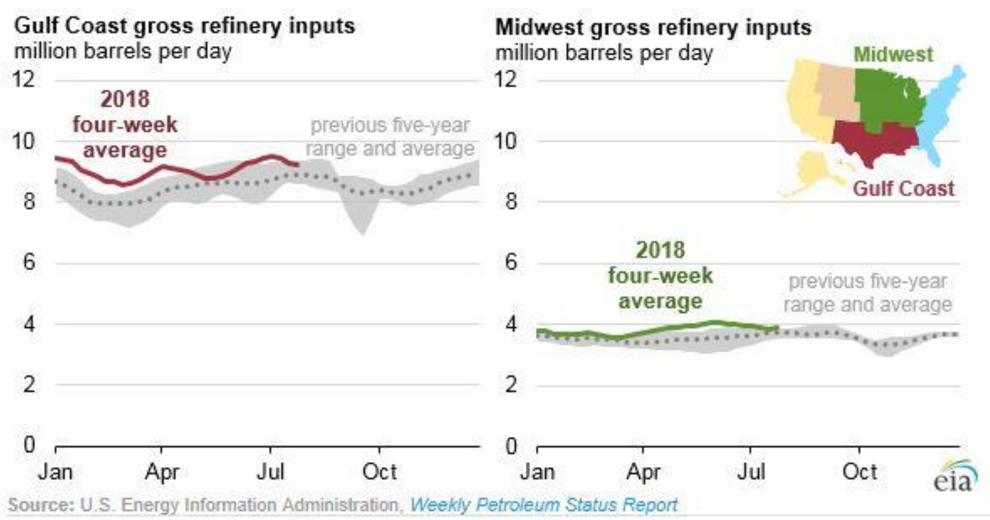
- **U.S. refineries running at near-record highs.** **EIA**
  - For the week ending July 6, 2018, the four-week average of U.S. gross refinery inputs surpassed 18 million barrels per day (b/d) for the first time on record. U.S. refineries are running at record levels in response to robust domestic and international demand for motor gasoline and distillate fuel oil. Before the most recent increases in refinery runs, the last time the four-week average of U.S. gross refinery inputs approached 18 million b/d was the week of August 25, 2017. Hurricane Harvey made landfall the following week, resulting in widespread refinery closures and shutdowns along the U.S. Gulf Coast. Despite record-high inputs, refinery utilization as a percentage of capacity has not surpassed the record set in 1998. Rather than higher utilization, refinery runs have increased with increased refinery capacity. U.S. refinery capacity increased by 862,000 barrels per calendar day (b/cd) between January 1, 2011, and January 1, 2018. The record-high U.S. input levels are driven in large part by refinery operations in the Gulf Coast and Midwest regions, the Petroleum Administration for Defense Districts (PADDs) with the most refinery capacity in the country. The Gulf Coast (PADD 3) has more than half of all U.S. refinery capacity and reached a new record input level the same week as the record-high overall U.S. capacity, with four-week average gross refinery inputs of 9.5 million b/d for the week ending July 6. The Midwest (PADD 2) has the second-highest refinery capacity, and the four-week average gross refinery inputs reached a record-high 4.1 million b/d for the week ending June 1. U.S. refineries are responding currently to high demand for petroleum products, specifically motor gasoline and distillate. The four-week average of finished motor gasoline product supplied—EIA's proxy measure of U.S. consumption—typically hits the highest level of the year in August. Weekly data for this summer to date suggest that this year's peak in finished motor gasoline product supplied is likely to match that of 2016 and 2017, the two highest years on record, at 9.8 million b/d. The four-week average of finished motor gasoline product supplied for the week ending August 3, 2018, was at 9.7 million b/d. U.S. distillate consumption, again measured as product supplied, is also relatively high, averaging 4.0 million b/d for the past four weeks, 64,000 b/d lower than the five-year average level for this time of year. In addition to relatively strong domestic distillate consumption, U.S. exports of distillate have continued to increase, reaching a four-week average of 1.2 million b/d as of August 3, 2018. For the week ending August 3, 2018, the four-week average of U.S. distillate product supplied plus exports reached 5.2 million b/d. In its August Short-Term Energy Outlook (STEO), EIA forecasts that U.S. refinery runs will average 16.9 million b/d and 17.0 million b/d in 2018 and 2019, respectively. If achieved, both would be new record highs, surpassing the 2017 annual average of 16.6 million b/d.

- **Oil rises after OPEC sources say Saudi crude output fell. Reuters**
  - Oil futures gained on Monday after OPEC sources said Saudi crude production unexpectedly fell in July, raising concerns about global oil supplies as the United States prepares to reinstate sanctions against major exporter Iran. Brent crude futures rose 54 cents to settle at $73.75 a barrel, while U.S. West Texas Intermediate (WTI) crude futures rose 52 cents to settle at $69.01 a barrel. Saudi Arabia pumped around 10.29 million barrels per day (bpd) of crude in July, two sources at the Organization of the Petroleum Exporting Countries said on Friday, down about 200,000 bpd from June. That came despite a pledge by the Saudis and top producer Russia in June to raise output from July, with Saudi Arabia promising a "measurable" supply boost. "Prices had dropped recently assuming that Saudi was going to continue to produce," said Stewart Glickman, an energy equity analyst at CFRA Research in New York. "If the argument now is that maybe they can't produce as much as everyone was hoping for, that puts some upward pressure on prices." Brent prices fell 6.5 percent in July, their steepest monthly drop since July 2016. U.S. investment bank Jefferies said in a note that "the Saudi and Russian production surges appear to be more limited" than expected, adding that the imminent reinstatement of U.S. sanctions against Iran also fed bullish sentiment. Washington is due to reinstate some sanctions against Iran that it suspended after a 2015 deal between world powers and Tehran that sought to curb Iran's nuclear program. Some of the sanctions resume on Tuesday. The United States also plans to re-introduce sanctions on Iranian oil in November, which could dent the OPEC member's output. Renewed sanctions are part of the Trump administration's strategy to deny resources to the Iranian leadership. Washington wants as many countries as possible to cut imports of Iranian oil to zero, a senior U.S. administration official said in a telephone press briefing. But a senior official at Iran's economy ministry said Tehran did not think the economic impact of the sanctions would be massive. "Many countries, including Europeans, disagree with the U.S. sanctions and are willing to work with Iran," said the official, who asked not to be named. Most Iranian crude exports go to China and India, but roughly 20 percent go to Europe, where refiners have already cut their purchases. Meanwhile, U.S. energy companies last week cut oil rigs for a second time in the past three weeks as the rate of growth has slowed over the past couple of months.

- **Lured by higher oil prices, U.S. shale producers boost capex. Reuters**
  - U.S. shale producers that spent the last year promising to control capital spending and adhere to strict financial controls are finding the lure of higher oil prices irresistible. Several, including producers Parsley Energy, Pioneer Natural Resources and Continental Resources, this week joined others that already raised capital spending, citing higher costs and a desire to accelerate drilling and well completions programs amid strong pricing. Last year, investors pressured shale companies, hard-bitten by the 2014 downturn in prices, to rein in spending and return more capital to shareholders through dividends and share buybacks, selling stocks of companies that spent more on drilling. Oil prices have climbed by about 40 percent in the past year, with the U.S. benchmark CLc1 on Wednesday around $67 per barrel. That run up helped push U.S. production to a record 11 million barrels per day in July, increasing demand for services and tightening labor markets. Derek Rollingson, portfolio manager of the ICON Energy Fund, which holds shares of more than a dozen U.S. shale producers, said increasing capital spending makes sense with oil prices expected to rise in coming months. "It makes sense in this environment given the strength of the forward (oil) contracts," he said. Continental Resources Chief Executive Officer Harold Hamm on Wednesday said oil prices could jump another 10 percent before leveling off, aided by U.S. sanctions on major oil producer Iran. Pioneer this week said it would expand its 2018 budget by around $450 million, with roughly 60 percent of that due to rising costs and around 35 percent stemming from increased production activity. Pioneer this year executed a $100 million share buyback program. When asked on its earnings call about the potential for additional buybacks, Chief Executive Officer Timothy Dove said the company would wait until it was generating positive cash-flow. ConocoPhillips in late July added about half a billion to its capital spending plan, bringing its budget for the year to $6 billion. "This is money that is really bringing big benefits with it," said Al Hirshberg, executive vice president of production, drilling and projects. The company remained committed to financial discipline, executives added. Top Bakken shale producer Continental increased its budget by roughly $400 million, with about half of that allocated to adding rigs and well-completions. Continental does not hedge its oil production, something the company on Wednesday said had enabled it to better benefit from this year's

bump in oil prices. Parsley Energy, which operates in the Permian Basin of West Texas and New Mexico, will add $100 million to $200 million to its budget. Pioneer and Parsley both attributed some of their increased costs to tightness in the labor market, as well as fuel and electricity cost. The unemployment rate in Midland, Texas, where many Permian workers are based, was 2.4 percent in June, well below the national average of 3.9 percent. “We’ve had a more significant increase in costs this year than we would have assumed,” Pioneer’s Dove said during the company’s earnings call on Wednesday. Dove expects pipeline constraints that are pushing down the price of Permian Basin crude to offset future increases in service costs, as companies opt to delay completing some wells. He said service inflation would become a bigger issue in 2020 and 2021, when new pipeline connections begin to relieve bottlenecks, spurring operators to frack wells they had drilled when prices were lower but had not completed. Rival independent oil producer EOG Resources (EOG.N) last week said it expected the industry to face between 5 percent and 10 percent inflation next year.





Oil and Gas Analysis

- **Rotary Rig Count Summary**

Location	Date	Week	+/-	Week Ago	+/-	Year Ago
United States	3-Aug-18	1044	-4	1048	90	954
	10-Aug-18	1057	13	1044	108	949
North Dakota	3-Aug-18	56	-1	57	3	53
	10-Aug-18	56	0	56	3	53
Canada	3-Aug-18	223	0	223	6	217
	10-Aug-18	209	-14	223	-11	220
International	Jun-18	959	-8	967	-1	960

  - **Baker Hughes**

- **Weekly Petroleum Status Report**

Stocks (Million Barrels)			
	Four Weeks Ending		
	8/3/2018	**7/27/2018**	**8/4/2017**
Crude Oil (Excluding SPR)	407.4	408.7	475.4
Motor Gasoline	233.9	231.0	231.1
Distillate Fuel Oil	125..4	124.2	147.7
All Other Oils	443.2	442.7	457.5
Crude Oil in SPR	660.0	660.0	678.9
Total	1,869.9	1,866.6	1,990.7

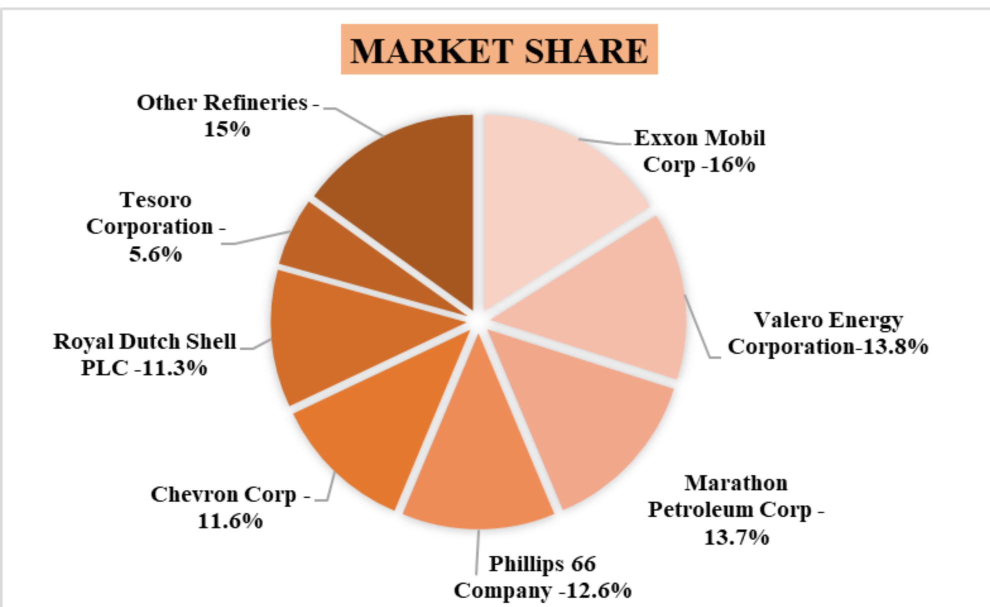
Products Supplied (Thousand Barrels per Day)			
	Four Weeks Ending		
	8/3/2018	**7/27/2018**	**8/4/2017**
Motor Gasoline	9,695	9,677	9,763
Distillate Fuel Oil	3,980	3,931	4,340
All Other Products	7,450	7,262	7,144
Total	21,125	20,870	21,247

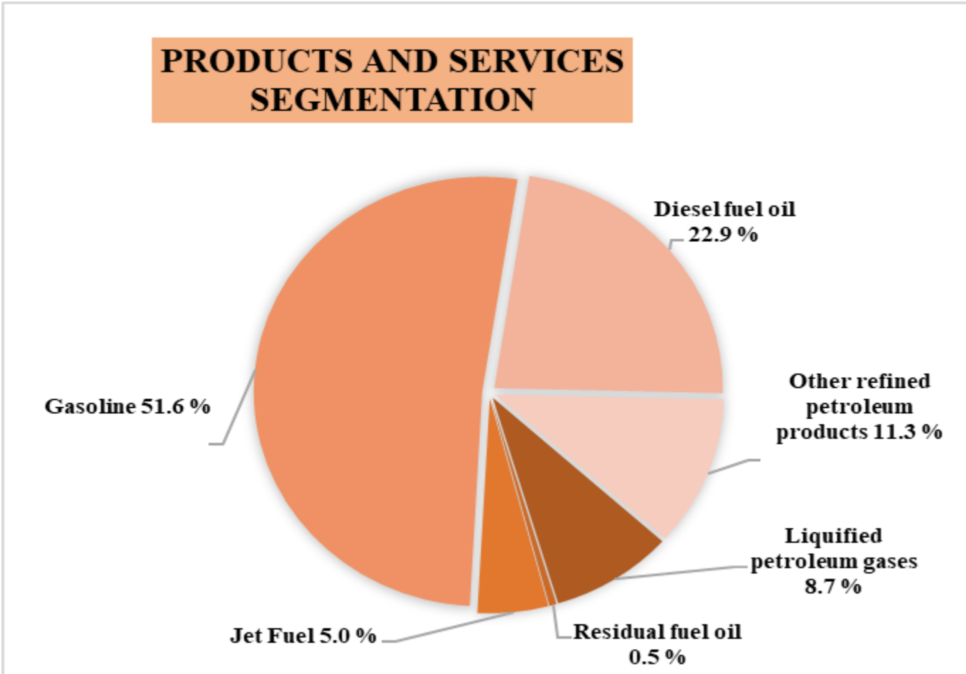
Refinery Activity (Thousand Barrels per Day)			
	Four Weeks Ending		
	8/3/2018	7/27/2018	8/4/2017
Crude Oil Input to Refineries	17,401	17,414	17,347
Refinery Capacity Utilization	95.2	95.2	95.0
Motor Gasoline Production	10,236	10,432	10,271
Distillate Fuel Oil Production	5,182	5,233	5,153

Net Imports (Thousand Barrels per Day)			
	Four Weeks Ending		
	8/3/2018	7/27/2018	8/4/2017
Crude Oil	6,303	6,134	7,222
Petroleum Products	-2,803	-3,009	-2,347
Total	3,501	3,125	4,875

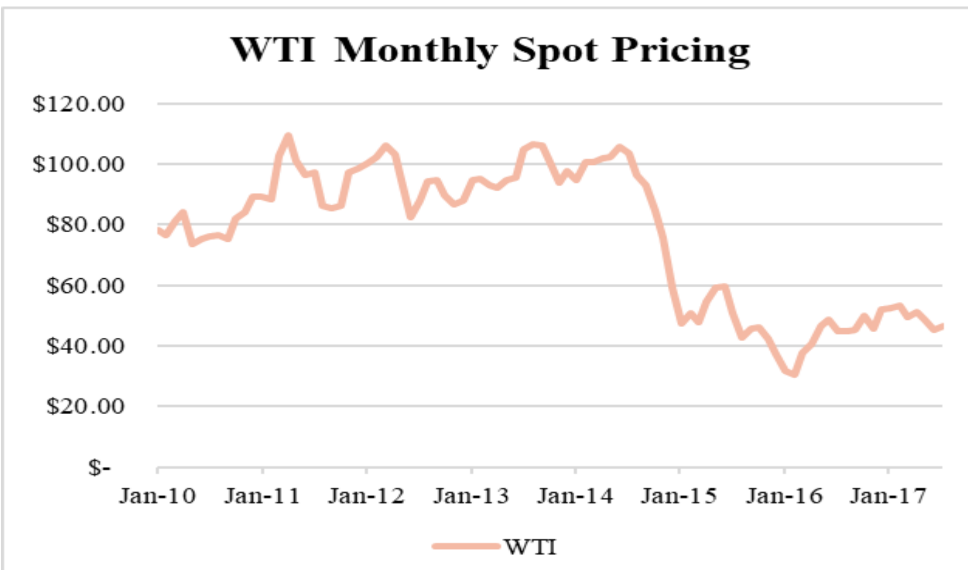
- EIA

- **US Petroleum Refining at a Glance**





PRODUCTS AND SERVICES SEGMENTATION
Diesel fuel oil 22.9 %
Other refined petroleum products 11.3 %
Liquified petroleum gases 8.7 %
Residual fuel oil 0.5 %
Jet Fuel 5.0 %
Gasoline 51.6 %



WTI Monthly Spot Pricing
$120.00
$100.00
$80.00
$60.00
$40.00
$20.00
$-
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
WTI

- **EIA**

o Key External Drivers

- **World price of crude oil**
  - http://markets.businessinsider.com/commodities/oil-price?type=wti
- **Demand from gasoline and petroleum bulk stations**
  - https://www.reuters.com/article/us-usa-natgas-kemp/u-s-natural-gas-prices-rise-as-winter-stocks-look-tight-kemp-idUSKCN1BU1RK
- **GDP of mainland China**
  - https://tradingeconomics.com/china/gdp
- **Trade-weighted index**
  - https://www.investing.com/news/economy-news/top-5-things-to-know-in-the-market-on-friday-541066
- **Total vehicle miles**
  - https://www.advisorperspectives.com/dshort/updates/2017/08/31/vehicle-miles-traveled-another-look-at-our-evolving-behavior