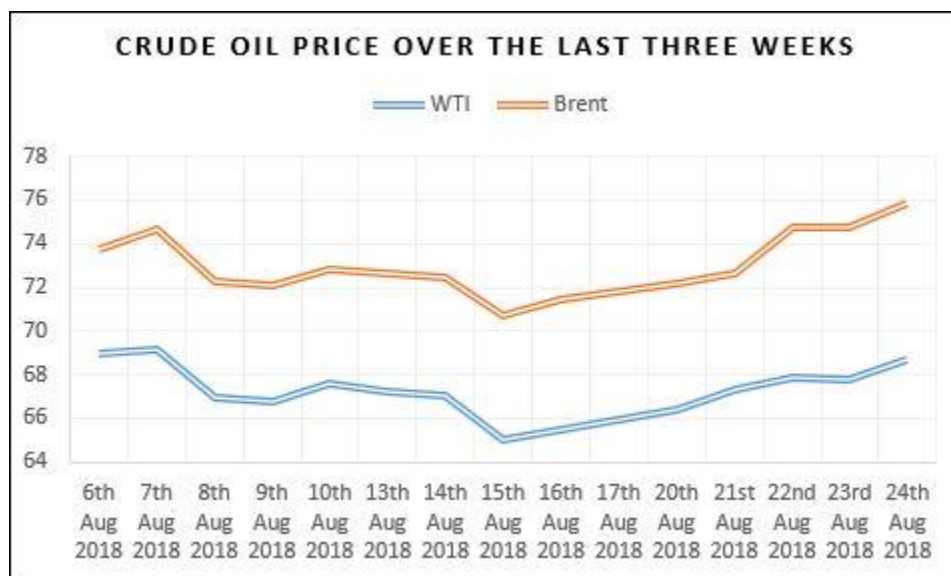
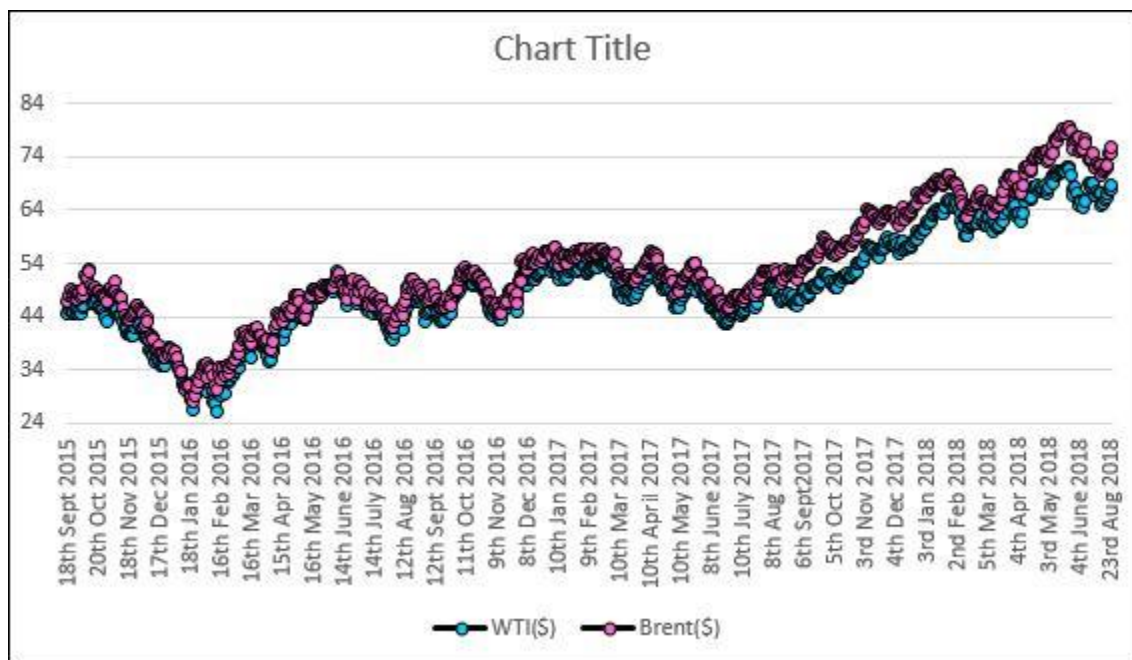


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- Even with the uncertainty over the US-China trade standoff hanging in there, and the economic turmoil in Turkey arising from the currency crises spilling over other emerging countries threatening demand for crude oil, still there are concerns over the US imposed sanctions on Iran that could tighten supply levels. In addition to this, as per the EIA data, the US crude stockpiles declined by 5.84 mb. The US has also announced that it will offer 11 mb of crude from its Strategic Petroleum Reserve, that could help soften the tight market situation. These factors together led to the oil looking up last week as you see in the graphics above.

- The US sanctions on Iran likely to come into effect in early November are having an effect on the way the business was being done till recently. Many Chinese shipowners have stopped transporting oil from Iran. In July and August, 17 ships used to carry oil from Iran to China were from the National Iranian Tanker Co., whereas three months prior almost half of these belonged to Chinese companies. South Korea and Japan have reduced shipments of crude oil from Iran. The shipments being received by the top-two state refiners in India are being delivered by tankers owned by Iran, on a delivered and insured basis. Oil tanker owners around the world are reluctant to haul Iranian oil, due to the risk of being cut off from transporting crude pumped from shale fields in Texas, as well as the wells in the Gulf of Mexico.
- The much-awaited Saudi Aramco IPO has been put on hold. The Aramco IPO has been an ambitious item on the Saudi Crown Prince Mohammad bin Salman's reform agenda, touted as the world's largest ever floatation, and the whole process was kick-started in January 2016. The crown prince wanted Aramco company to be valued at \$2 trillion, for which analysts put a much lower figure. Besides, Saudi authorities are finding it difficult to settle on their desire for the biggest pool of capital, which may be a choice between New York and Hong Kong, the latter being preferred due to its less stringent regulation. The news at present is that Aramco is focusing on buying a strategic stake in giant Saudi Basic Industries Corp.
- Automated rigs are being used to drill wells, but when it comes to fracking, the pumps have to be manually revved up, which can lead to inefficiency and delays. Using the available data and the necessary computations, Halliburton has now tested robotic fracking in the Permian Basin fields (Texas and New Mexico), wherein water, sand and chemicals can be pumped to frack open the rocks for releasing the hydrocarbon. This would be a new application of digital technology that is expected to bring efficiency and cost saving to our industry.

So much for the industry news this week.

For the lighter side this week

Much is being written these days about digital transformation that energy companies are going through. The digitalization being referred to here will constantly be evolving as energy companies adapt to new ways of doing business. The digital technologies that are enabling energy companies embrace such transformation are cloud computing, mobile technology, Internet of Things (IoT) and big data and analytics. So, what are these and how is the transformation happening?

Cloud computing is changing how we use software as well as we access and deliver data. I have written about cloud computing before and can be accessed at this link (http://www.choprarseismic.com/wp-content/uploads/2018/06/post-on-template_30th_June2018.pdf). But the advantages vary from convenient collaboration across different groups or teams, economically scaling operations as required, both in terms of computing and software access.

Mobile technology is about mobile devices and their connectivity, which provides the necessary information as when it is required by the personnel in the field or headquarter office. This helps decision making and thus helps with the progress of a company.

Internet of Things (IoT) refers to computing devices interconnected through the internet. Such devices could be your smartphone, thermostat in your house regulating the temperature with the refrigerator or the heating unit, the video door bell, coffee makers, or anything else. The IoT network provides the

necessary connectivity or sharing of all such devices and thus helps provide smart communication. Whether it is in our homes or the businesses run by energy or other companies.

Big data and analytics is all about gathering, examining large volume of data for insights in terms of hidden patterns, correlations, trends and other useful information that can help the companies make informed decisions. Such decisions directly affect the bottom-line of companies. Proper data management and analysis by way of adequate software employing machine and deep learning forms a large component of data analytics.

Energy companies that are employing the components into their work culture are realizing the differences, which include a collaborative work environment, where technology adoption, innovation and creative problem solutions are emphasized. Such strategic decisions by energy companies have started benefitting in terms of profitability, which is what matters.

I hope you find these interesting.

So much for this week! Till the next post, stay safe and happy!