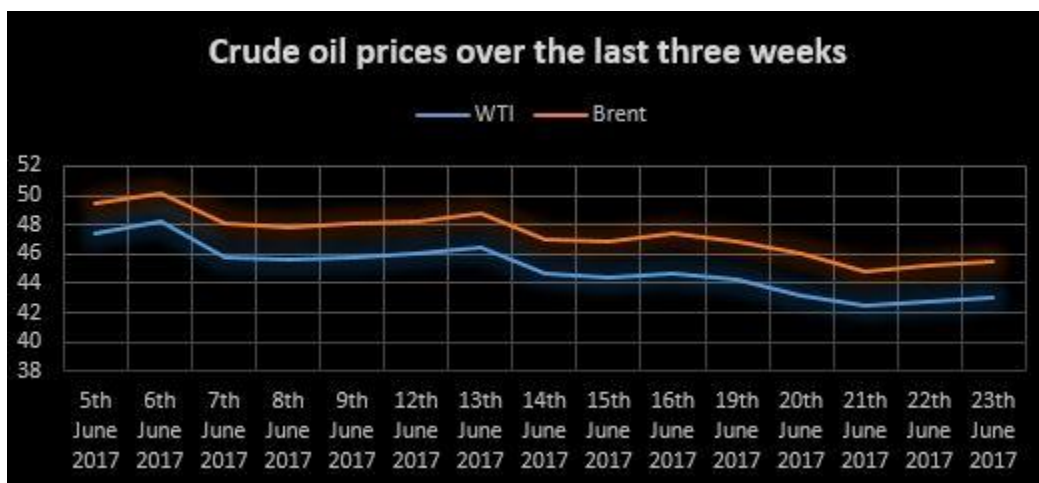
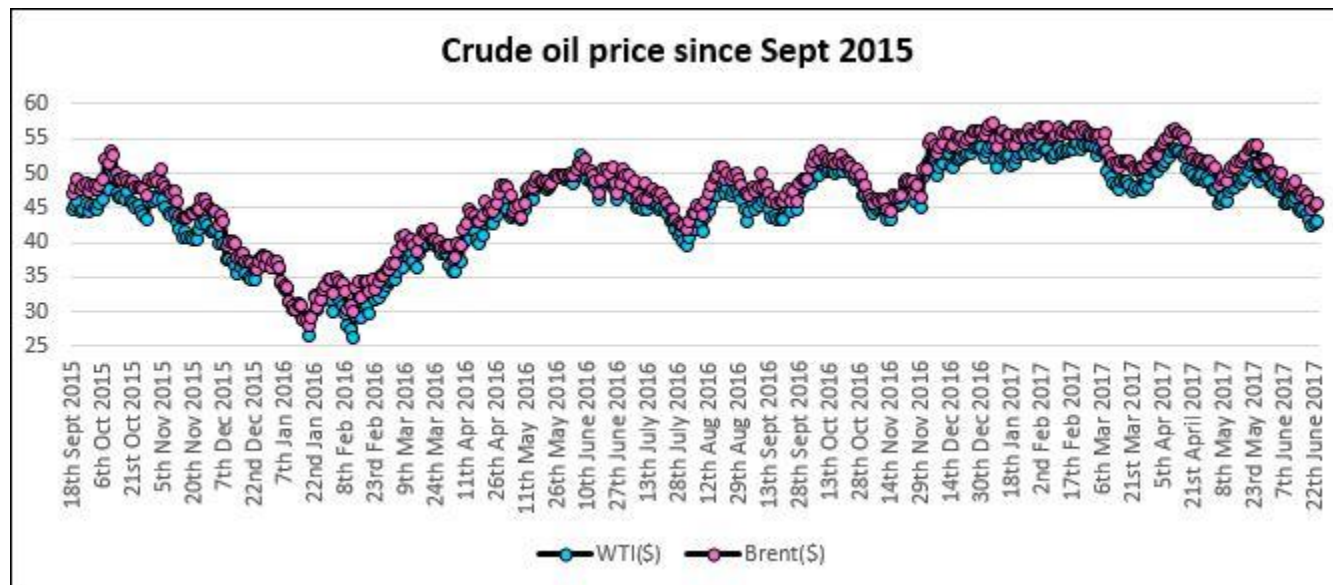


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Some of the news items for this week are as follows:



- The oil price this week fluctuated between \$44 and \$42, in fact dropped first and then rose a bit. Even though Saudi Arabia has been saying for months now that the market is rebalancing after the OPEC agreement came into force since beginning of January this year, but the data and other indications show otherwise. The US stockpiles and fuels have swelled in recent weeks and IEA has also said that 2018 may not be any better. The EIA reported on Wednesday that the US oil production rose by 20,000 b/d last week to 9.35 mb/d. Even though the crude stockpiles slid by 2.45 mb/d to 509.1 m, the number remains above the 5-year average by 100 mb. As reported in my last two blog posts, some of the leading world banks have said that oil prices may not hold above \$50 next year and that OPEC will need to extend production cuts till the end of 2018. The slight rebound we saw in the crude oil prices on Thursday was in response to a decline in gasoline inventories. The rise in the US oil production is more than what OPEC had expected, and many analysts have said that OPEC should have cut deeper instead of just extending the production

cuts in April. The slight rise in the crude oil price seen on Friday was also seen partly due to the weak UD dollar.

Another sign that the market is far from rebalancing is that many oil traders are storing oil at sea in tankers, which has reached 111.9 mb, per the tracking company Kpler SAS. Higher volumes of storage are in North Sea, Singapore and Iran.

- Another important concern that will have its effect sooner or later is that, per the EIA at the end of May 2017, US had 5946 drilled but uncompleted wells, which is the maximum in 3 years. In May alone, 125 more wells were drilled in the Permian, which can add 96,000 b/d to the market. As the uncompleted wells are fracked and completed, which can happen in 2017 and 2018, more crude oil will get added to the already glutted market. Shale drillers can afford to keep drilling with oil at \$45 to \$50, thanks to the drop in the cost of drilling. The break-even price in the Permian now is \$35. Thus, to keep the shale drillers from completing their uncompleted inventory, the price will need to collapse to \$35.
- Due to the hazy view of the oil market in terms of how the crude prices are going, the mergers and acquisitions of oil companies fell to \$15 billion from \$23 billion in the second quarter, according to estimates from Bloomberg Intelligence. The deals have plunged to the lowest since early 2015.
- Tropical storm Cindy in the Gulf of Mexico that started moving towards Louisiana earlier in the week triggered watches and warnings, and prompted oil companies to take appropriate action on their installations (platforms) in terms of evacuations and halts. These measures could influence the market as 17% of the US crude comes from the Gulf of Mexico.
- With Mohammed bin Salman's appointment as Saudi crown prince on Wednesday this week, there was no immediate reaction in the market, as minimal changes are expected to oil-production policy. This is because the prince is already in charge of the oil policy. But he does have formidable challenges ahead. Saudi Arabia earned \$134.4 billion in 2016 from oil exports and oil-refined products as per OPEC data. This is down 60% from the peak figure of \$337.5 billion in 2012. The kingdom has been tapping into its petro-dollar reserves, which have dropped to below \$500 billion from close to \$750 billion in 2014.

So much for the industry news this week.

For the lighter side this week

Jupiter is a giant planet, the biggest in the solar system, and due to its high gravity, it can 'collect' many moons. A recent article in Scientific American has reported that astronomers Scott Sheppard, David Tholen and Chadwick Trujillo from the Carnegie Institution for Science in Washington DC, using the Magellan-Baade reflector at Las Campanas Observatory in Chile discovered two more moons for planet Jupiter, bringing its total number of moons to 69. These two moons, being referred to as S/2016 J1 and S/2017 J1, where S stands for satellite, and J for Jupiter, were discovered as the astronomers were looking for very distant objects in our solar system. Both these moons have highly elongated orbits, with S/2016 J1 orbit at an average distance of 21 million kilometers and S/2017 at 24 million kilometers. The

astronomers believe there are other Jupiter moons yet to be discovered, and news about them will probably come in 2018.

These moons are 1 to 2 km in size, which seems very small compared to the size of the planet Jupiter, but it does remind us of the abundance of material that exists in the solar system, which we are not aware about yet. Check out all this at <https://blogs.scientificamerican.com/life-unbounded/jupiter-now-has-69-moons/>

Have you ever wondered how these moons for different planets may have been formed?

Let's take the example of Earth's moon. There are various theories that may have been proposed. Per the giant impact hypothesis, a massive body called Theia, formed in the early solar system crashed into the Earth soon after the Earth came into existence, and created the moon. According to the co-formation theory, the Earth and its moon were formed at the same time, just as due to gravity particles come together and form a planet. And finally, the capture theory suggests that due to the gravity of the planet, a rock body formed elsewhere in the solar system gets captured and drawn into its own orbit.

These different theories explain some observations such as similar or different compositions of the planets and their moons, the differing or similar density of matter, etc. This is an interesting area of research and astronomers are engaged in finding answers to all such questions.

Planet	No. of moons	Remarks
Mercury	0	As mercury is very close to the Sun, and because of its gravity, it may not be able to hold on to its moon.
Venus	0	Why Venus has no moon is still a mystery.
Earth	1	
Mars	2	
Jupiter	69	
Saturn	62	(not counting the rings), some awaiting confirmation.
Uranus	27	
Neptune	14	
Pluto	5	Pluto does not satisfy the criterion for a planet, but still included here.

Did you know?

Does snoring occur while breathing in or out?

Snoring refers to noisy breathing during sleep and is a common problem, though more prevalent in males. When we sleep, the muscles of our throat relax and the tongue slips backwards somewhat. With age the throat muscles relax more, and so when we breathe in the walls of the throat begin to vibrate, which is the sound produced and referred as snoring. The narrower the air passage in the throat, the greater the vibration, and the louder the snoring.

There are various factors that could contribute to snoring including sleep positions, consumption of alcohol, abnormality in the nose and throat.

I hope you find these interesting.

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