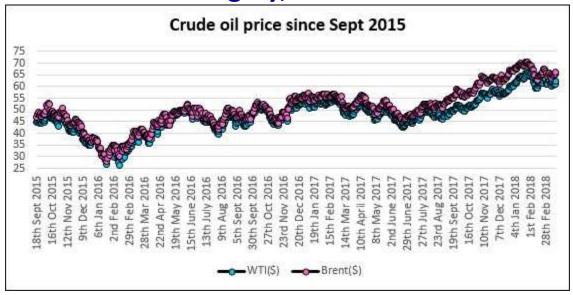
www.chopraseismic.com Calgary, Canada





• The price of the barrel fell over the first three days and rose for the next two, but stayed in the early \$60s (WTI). Per Baker Hughes data released on Friday the week before last, the rig count in the US fell by 4 to 796. Also, during that week the US oil production rose by 86,000 b/d to 10.4 mb/d, as per EIA. The price of the barrel fell due to the rising US supply, and also due to the dollar strength. Goldman Sachs Group has recently forecast a strong global consumption growth, but crude production and stockpiles have climbed higher. Also, there was news that Permain Basin claims \$2 for every \$10 spent on oilfield services and equipment around the globe. Spending in the Permian is expected to climb 50% this year from the boom times in 2014. Other signals on the world stage, such as the firing of Rex Tillerson as Secretary of State by President Trump and the consequent boosting of Iran risk, the IEA statement this week that Venezuela's oil production

- will fall later this year, as well as the delay in Saudi Aramco's IPO, have increased the uncertainty, and thus the price of the barrel later in the week.
- The oil exports from the US to the Asian markets have been increasing, and the OPEC deal perhaps is giving their share market to them. As the US output expands, these exports will grow, and help drain the domestic oil supplies. Over the last 6 months, the US exports have averaged 1.5 mb/d, which is double over the previous six months. Such developments risk the price of the barrel to drop below \$60.

So much for the industry news this week.

On the lighter side

Over the last decade or so, we have seen smartphone cameras become better and better, and now have reached as stage where, though not beat the DSLR (digital single-lens reflex) cameras, but provide a good quality alternative to them. What is more encouraging now is that the future of the smart phone cameras seems even more promising, with *computational photography*. This apparently, is the next big thing that we can look forward to.

Computational photography uses a swarm of data from multiple sensors and combines them algorithmically to produce a photo that would be way superior than an image that is captured by optical means on a film or a digital camera as is being done at present. The present thinking and implementation being experimented with is to use multiple camera elements (lenses) with different focal lengths and exposures. A company by the name 'Light' is working on a camera with 16 elements with three focal lengths, which fuses together the individual images to produce a 52-megapixil image. All this will be assembled within the size of the smartphone.

The images captured by the individual sensors will be analyzed for slightly different perspective of the scene they captured, and such multiple perspectives are used to reconstruct using software employing machine learning, an image that has a better resolution and depth. Such images are expected to boast of perfect focus, better colour management, better shades of lighting on faces or scenery, etc.

Such multi-capture and computational image cameras are the future, and you should probably see some models rolling in, in the next year or so.

I hope you find this information interesting. So much for this post!

Till the next post, stay safe and happy!