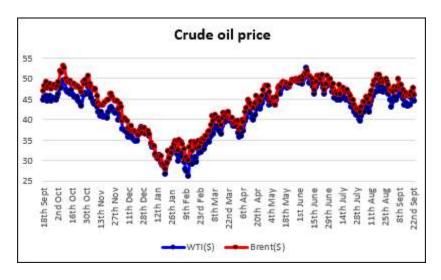
## www.chopraseismic.com Calgary, Canada

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



- 1. This week the price of oil fluctuated between \$43 and \$47. Earlier in the week the OPEC Secretary General Barkindo said in a statement that the Algiers talks are for consultation and not decision making. Though the prices were a bit shaky on receiving this news, but they gained some strength on receiving the news from EIA that the US crude stockpiles decreased 6.2 mb last week, which was more than the forecast by analysts. This was followed by the statement from the Algerian Energy Minister that OPEC and the non-OPEC countries must find a way to reduce 1 mb/d to rebalance the market, and that the Algiers meeting could transform from a discussion meeting to a formal session.
- 2. All eyes are now on the forthcoming OPEC meeting at Algiers on September 28<sup>th</sup>. Venezuelan President Nicolas Maduro said that OPEC members are close to reaching an agreement on how to stabilize the oil market and a 'definitive answer' will come at the meeting.
- 3. As the downturn in the global oil sector gets into its third year, oil companies as well as service companies have been working on bringing their costs down and becoming more efficient. Such measures have enabled them to continue to produce and perform even when the oil prices have touched 12-year lows. In fact the cost cutting measures have provided some resilience which has resulted in high cost producers of oil in the North Sea to continue producing in the face of low oil prices. As per the IEA, the UK North Sea production of crude and condensate will top 1mb/d in 2016 (8% higher than last year), reach 1.07 mb/d in 2017, 1.11 mb/d in 2019 before it starts falling off to 956,000 b/d thereafter.

In Norway also, similar efficiency gains and production from some fresh start-up fields have enhanced the country's production. On Monday (19<sup>th</sup> September) celebrations were held as Statfjord oil field delivered 5billion barrels of oil or oil equivalent since the first oil in 1979. The field is likely to continue to produce till 2025.

The production from Russia has also been increasing and running high. According to EIA, the production from the US Gulf of Mexico is expected to reach a record high in 2017. Along with all the cost-efficiency measures, oil companies have also been cutting down on their exploration budgets, which has led to a drop in the new oil discoveries. This will have a serious effect on production in the next five years.

- 4. Even though the oil prices were riding high between 2005 and 2014, a statement from Goldman Sachs Group said recently that the return on investment for BP, Shell and ExxonMobil was low. That is, though these companies generated high cash flows, the return on their investments was low as their costs were high. With the oil prices in the early \$40 range, the return on investment for these companies is at a 50 year low. The cost efficiency measures adopted by different companies have reduced their own costs as well, and thus their breakeven prices are also lower. The returns on investments may remain low for these companies and others, and they may just earn their cost of capitals.
- 5. Despite low oil prices, the prices that some of the oil companies are paying for land deals in the Permian Basin of Texas are double of what was paid in the first nine months of 2014, when the oil price was above \$100. The main reason for this is that drilling in the Permian Basin remains profitable despite the low oil prices. The source rocks offer different oil and gas layers where multiple horizontal wells can be drilled. Besides the favourable geology, the cost of production is low with break-even price being \$30, which is thanks to lower development costs in the downturn, lower service cost, and more efficient techniques.
- 6. One of the key findings of the annual Deloitte oil and gas professionals' survey has suggested that a recovery in the oil and gas industry may have begun or will begin next year. Another key trend in the survey is the \$60 threshold price, or this price will be reached by end of 2016.

So much for the industry news this week.

## For the lighter side this week

Often we hear or read about the topic of leadership. Whether it is leadership in a political arena, or that for leading national/multinational companies, search is always on for an effective leader who can bring positive change(s) in the organization or the state or country. The topic has gained significant prominence in the last decade or more in that an entire industry has developed around this topic. Books are being written, articles are published in magazines, and some graduate courses are being offered in some major universities. After having gained some experience, every individual thinks of himself/herself as a leader, and there is nothing wrong with such an expectation. But such a supposition or expectation is not going to generate effective leaders who can produce results. The leader should be above the other leaders in his/her time or generation, who is looked up to, admired for his/her work, and how it benefits others. So the important question is how do such leaders come to be?

One important contention that has been put forth is, to become a great leader you must first be a great follower. If you search through history, you will notice that great leaders always started by following one or more leaders of their times. That is where they learnt the required skills. As they go along, they gradually pick up or hone the traits required for becoming a great leader, and work on their weaknesses.

A great leader is usually a peoples' person, who enjoys working with others. So loners need to note this quality. Similarly, developing their personality in terms of an outgoing style, persistence, independent judgement, work ethic, competence, honesty, courage, communication skills, knowledge, controlling egos, taking initiative, mentoring taking performance feedback, developing a vision, rendering credit and praise where it is due, and loyalty, apart from being a good human being are qualities required of a great leader. Such qualities are easily imbibed by individuals during their formative years by following other great leaders.

It is possible that an individual may not have all the above listed qualities, but great leaders are usually seen to have a liberal dose of such qualities. I believe MBA programs do have such lessons disseminated to the students, so that they begin their awareness there, and go on to becoming effective executives.

Leadership is all about a commitment for following a vision, on obligation to achieve a goal, with the help of team members.

An analogy is that of an individual who has worked on a position and is now a manager. He is likely to be more effective as he understands what need to be done and the problems that are associated with it. There is however a downside to this aspect, which I will discuss in detail another time.

## Did you know?

When we look at the veins in your body, they are blue. Of course this is easily visible on people with fairer skin than dark. So, a question that pops up in our minds is, why are they blue when they carry blood, which is red?

If you ask around you will get different answers. One of the answers that you will probably get is that the blood in the veins is deoxygenated. There is truth in the fact that the blood carried by the veins has a lower concentration that the blood carried by the arteries. But it is not the reason for the veins appearing blue.

Blood from the arteries is bright red in colour, which is formed by a combination of haemoglobin, iron and oxygen in the form of molecules. This combination tends to absorb the other colours of the visible spectrum and reflects the red colour. Blood that has a lower concentration of oxygen shows a maroon colour, and is not blue. Even when surgery is performed, the surgeons will tell you that there is no blue blood in the human body.

So where is the blue colour coming from?

The answer lies in how our skin interacts with the white light. The skin does not absorb much light, and depends on the *melanin* (the colouring pigment) content therein. But the as I have mentioned above, blood absorbs light of all wavelengths except red. If the blood vessel is very close to the surface of the skin (< 0.5 mm), most of the blue colour is absorbed by the vessel, and red is reflected, such that the ratio of the blue/red reflected light is high. So the vessel will appear red.

If the vessel is somewhat deeper in the skin (> 0.5mm), less of the blue light is absorbed and also the blue colour does not penetrate much in the skin. Because of this more the ratio of the blue/red reflected light is not that high, and so the vessels appear blue.

Besides, the fact that veins are also located closer to the skin, and have thinner walls that the arteries also pays a role in them looking more blue than red.

You might want to check it out at <a href="http://chemistry.about.com/od/lecturenoteslab1/a/Why-Veins-Look-Blue.htm">http://chemistry.about.com/od/lecturenoteslab1/a/Why-Veins-Look-Blue.htm</a>

I found this very interesting.

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