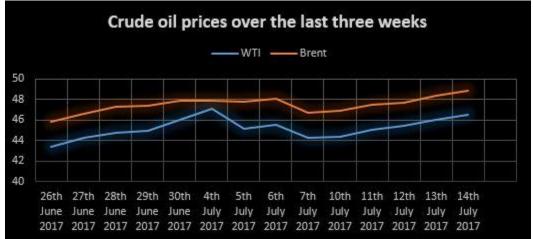
www.chopraseismic.com Calgary, Canada

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





- The crude price gained strength this week due to a few reasons. An IEA report has indicated that demand growth is accelerating as crude imports from China have grown by 13.8% during the first six months in 2017, compared with the same period in 2016. The EIA has signaled a drop in the crude stocks during the last week as well as forecast for the average WTI price in October 2017 to be \$48. The global liquids consumption growth is expected to be 1.5 mb/d in 2017 and 1.6 mb/d in 2018. Finally, Shell has closed one of its two export pipelines in Nigeria that exports the country's Bonny Light crude oil.
- Some energy analysts are looking at Saudi Arabia to be what it is going to do as the country's energy minister has repeatedly said that Saudi Arabia 'will do whatever it takes' to eliminate global oversupply. While in the past it has cut production deeper that its set limit, at present Saudi Arabia is quiet, and in June its production was 10.02 mb/d (above the limit by 90,000 b/d),

the highest levels since the accord began. There have already been concerns that OPEC cutbacks are being balanced by US shale production. More recently Saudi Arabia has reduced crude prices for its Asian buyers to keep its market share.

- Ever since OPEC extended its production cuts till March 2018, there has been an expectation that it could have cut deeper for the crude price to come up. The OPEC as well as Russia did not tow that line. Now the former oil minister of Qatar has said in an interview that it is not beneficial for OPEC to deepen "its cuts because prices will go up and shale oil producers and others will take OPEC's market share". The US shale output and the increased production from Libya and Libya have played the spoil sport in OPEC's effort at production cuts and reducing global inventories.
- According to one estimate, over the present downturn seen in the last three years, the oil industry has lost over \$1 trillion in investment and fewer new discoveries are being made. Halliburton estimates the industry has lost about \$2 trillion in investment.
- As per some estimates, close to 20 mb/d of new output will be required over the next 5 years to meet the rising demand and decline of production from producing fields. Mature oilfields in various parts of the world provide a third of the world supply and their production declined last year by 5.7% per one estimate. Such estimates are termed as unrealistic by those who believe that alternative energy sources will be deployed in the next 5 years. Even with good intentions, robust alternate sources of energy could take longer and may not be without challenges. If the industry waits for the right time to make investments by 2020, there could be scarcity of oil and the prices could spike.
- Libya and Nigeria are exempted from the OPEC and non-OPEC pact on reducing their output by 1.8 mg/d overall. Now that their production has been increasing over the last few months, other members are looking forward to bringing them under the pact. It is expected that both countries will attend the meeting of ministers from six countries, namely Kuwait, Venezuela, Algeria, Saudi Arabia, Russia and Oman will meet in Saint Petersburg, on July 24th, and discuss this issue.
- Some European energy traders believe that shale oil production is here to stay, and have invested in US infrastructure and sought supply deals for shale oil and gas. With the US lifting its ban on export of oil and gas, these energy traders are seeking traders for the US sale in Asia. Such developments may suggest that the present low prices may not see their elevation in the \$60 or \$70 range any time soon.

So much for the industry news this week.

For the lighter side this week

While browsing through the news the other day, I came across a photo of Bollywood stars Saif Ali Khan and Kareena Kapoor's son Taimur, who has a strong resemblance to his dad. That reminded me of a study on paternal resemblance I had stumbled across some years ago. So, I decided to bring it up in this week's blog.

Do babies resemble their fathers more than their mothers?

A study carried out by Nicholas Christenfeld and Emily Hill on facial resemblance between 1-year old children and their fathers or their mothers was published in *Nature* in 1995. The study showed that 1-

year old children resembled their fathers more than their mothers, and it received considerable attention.

Such a question does cross parents' minds. The above-mentioned study put the question to 122 people (strangers) with photos of 1-year old children, their mothers and fathers. About half of the group members paired infants with their fathers.

It was an interesting observation and various explanations were offered. But more interestingly another study published in *Evolution and Human Behavior* in 1999, by Robert French and Serge Bre'dart of the University of Liege in Belgium set out to replicate the earlier one could not do so.

Yet another study co-authored by Paolo Bressan, a psychologist at the University of Padova in Italy, and used larger photos than used by Christenfeld and Hill, showed that "some babies resemble their fathers more, some babies resemble their mothers more and most babies resemble both parents to the same extent".

Two other studies, again published in *Evolution and Human Behavior* one in 2000, and another in 2007 found babies actually look more like their mothers than their fathers in the first three days of their lives.

So, there may not be much truth in the fact that babies look more like their fathers, but they must look like one of the parents or a mix of both, i.e. eyes of the mother, chin of the father, forehead of the mom and ears of the dad, nose of the mama, and so on. Also, there may be truism in stating that as kids grow up their looks change, and their height goes on one of the parents. A good way to see or determine the resemblance may be to compare at the same time, i.e. when mom and dad were 12 years old, hat they looked like, what their heights were, and how they compare with their offspring, in terms of their features or traits.

I think such a debate should be left alone, as we are better off saying we inherit genes from our parents, and their mutations as well, and such genes and mutations should be healthy so that we all live a healthy and a happy life.

I hope you find these interesting.

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