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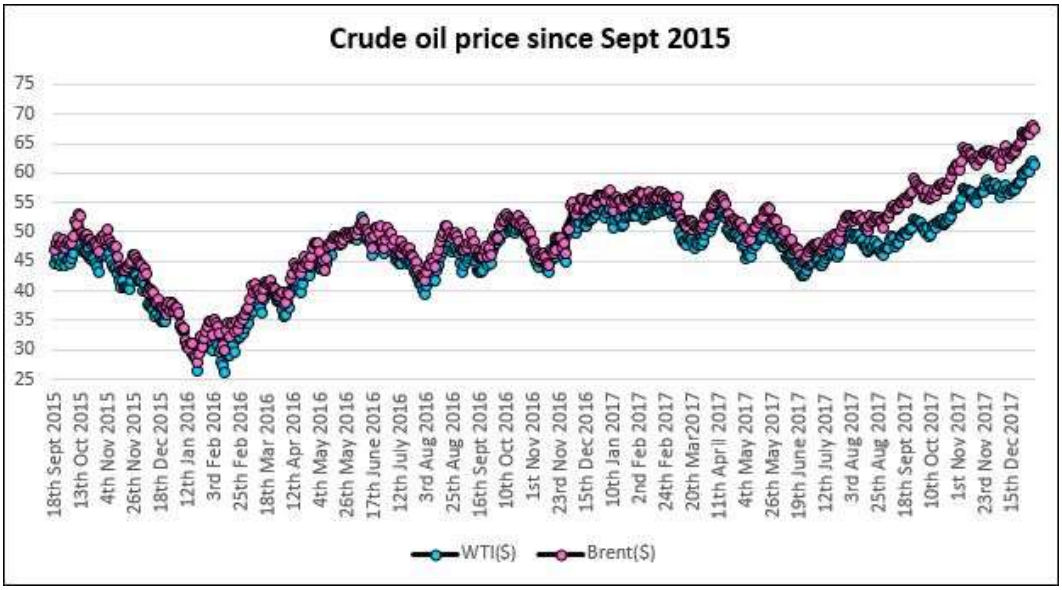

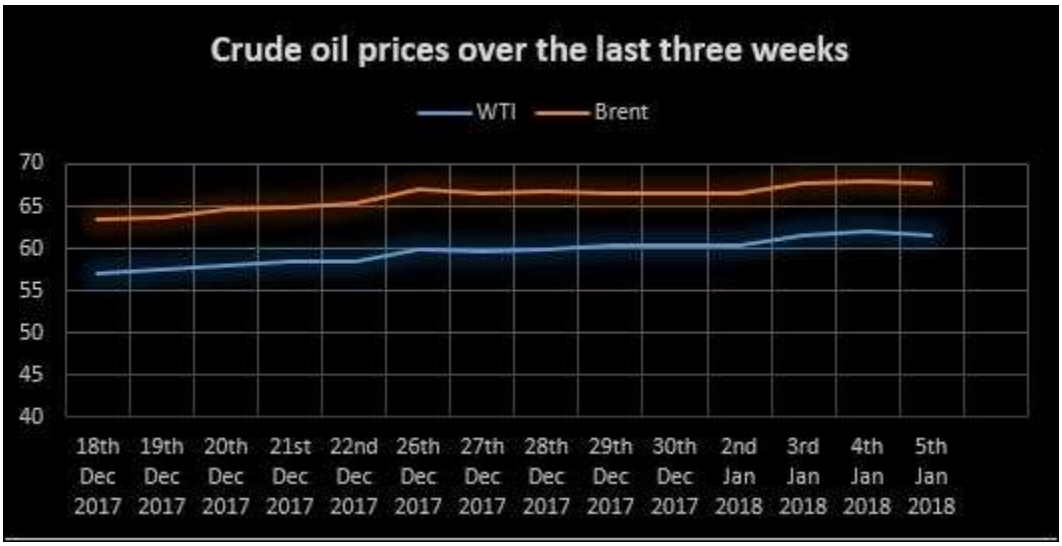

Over the last 2+ years, almost every week I have written about how our industry is being impacted by the price of the barrel. In my sub-column, '*On the lighter side*', I have shared about anything new that I may have come across during the previous week. Over the last little while, this practice has seen a change, due to paucity of time.

In this first column for 2018, I wish to begin with listing some of the salient points for our industry in 2017.

- US exports of crude oil, as well as the LNG and refined products, rose.
- Cost reductions that the US shale producers have made are 30-40% below their levels 2 years ago. Even in the conventional setups, cost-cutting campaigns have borne fruit.

- OPEC and its partners decided to extend their production cuts till the end of 2018, with Libya and Nigeria accepting an upper limit to their production.
- The oil and gas industry survived the weak demand and lower oil prices, which have turned around lately, becoming somewhat stable and up-looking.
- With many companies continuing to lay off their staff during the year, though less than before, the oil industry lost more smart veteran talent.

Talking about the performance of oil and gas companies, we understand the biggest external pressure for a company to perform is the price of the barrel. All oil companies strive to maximize profit, and at the same time increasing the value of the company year after year. In the interest of efficiency, the companies generate more revenue and keep the costs down. For doing this, the production of oil and gas must increase continuously, howsoever that happens. During downturns, it is these very companies that make drastic cuts for their survival, eliminating projects, slashing jobs and deferring important investment. This slows down growth and impacts the long-term objectives. Such actions also create instability within the companies, as it is difficult to work confidently, in a focused way in such an environment.

Besides all these, a very important objective for oil and gas companies is to try and broaden their asset portfolio and show accretion of proved reserved. The greater the proved reserves for a company, the greater its value. In fact, the key performance indicator is coined as the *Reserve Replacement Ratio*, which provides a glimpse of the overall health of the company. In the last three years, the RRR for most oil and gas companies has not been what the companies could call themselves proud of. Of course, this will have repercussions in our industry in that when most of the accreted reserves have been produced, there will not be much that is left to be produced. This could then lead to a shortfall in production, which in turn will drive up the price of the barrel. If the present RRR situation continues, we could see a spike in the price of the barrel, may be 5 to 6 years down the road.

A newer trend in our industry that needs to be mentioned, is about companies examining the implementation of digital technologies for performance improvement. These technologies offer new tools and techniques to capture and leverage information to streamline operations, and at the same time increasing production. Machine learning is becoming a buzz word, though it is still early in its innings.

So much for the industry news this week.

Did you know?

The other day I happened to come across a quiz program on 'You Tube', where the following question was asked:

Q. Which of the following numbers when multiplied with itself would give the answer as 12345678987654321?

(A) 11,111
(B) 111,111
(C) 111,111,111, and

(D) 111,111,111,111

The answer is (C).

The participant, an Indian boy, reasoned it out and got it right.

But I figured later that when we multiply 11 by 11, we get 121.

Similarly, 111 by 111 gives 12321

And, 1111 by 1111 gives 1234321. Notice when we multiply 4 digits by the same four digits, the answer is 7 digits.

By this logic, if we go to 9 digits, we will get to 17 digits in the answer, which happens to be in the given number as the product.

The interesting part is the symmetry of the digits in the product, which comes from the unity digits that are chosen in the multipliers.

I hope you find this information interesting. So much for this post!
Till the next post, stay safe and happy!