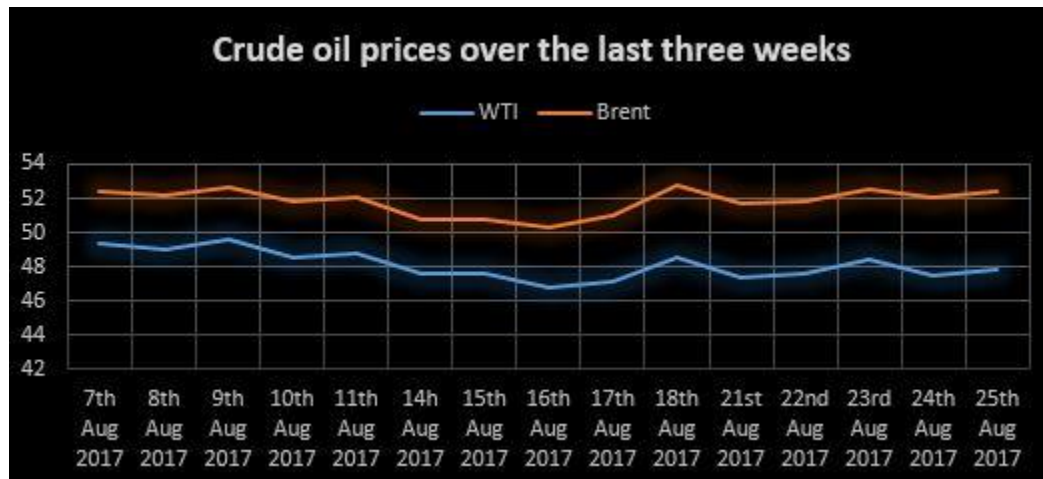
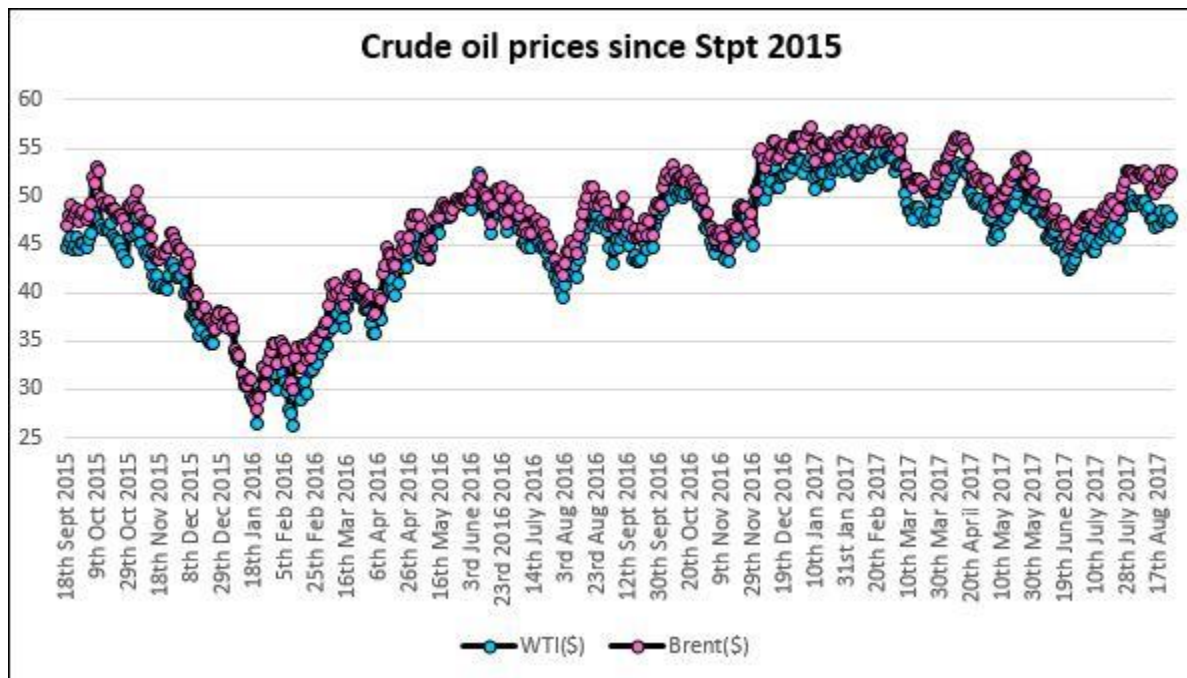


Calgary, Canada

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



- Earlier this week the crude oil prices declined a bit in response to the news that the US production has continued to expand (highest since July 2015), Libya is working to reopen the pipeline linked to their Zawiya export terminal, and the OPEC remaining firm in making sure its members abide by their allotted production cuts. Later in the week, the oil price looked up on receiving the news that US stockpiles of oil and gas had declined (by 3.33mb to 463.2mb, and gasoline by 1.22 mb to 229.9 mb). The price rose again on Friday as the US oil industry prepared for countering hurricane Harvey.
- Hurricane Harvey is a tropical storm that has gained strength in the Gulf of Mexico, and is likely to hit the refinery hub (between Corpus Christi and Houston) on Friday evening or Saturday. Harvey is the first hurricane to hit Texas since 2008. The US petroleum industry has braced for the storm as it

became category 2 storm, about 220 miles (355 km) from Corpus Christi, Texas, and has a wind speed of 105 miles per hour. Heavy flooding and rainfall (12 to 20 inches) is expected across much of the Texas coast. Many energy companies (Anadarko, Shell, etc.) have pulled workers off oil platforms and halted onshore drilling in south Texas. The Port of Corpus Christi has been closed to traffic, and oil refineries in the city have been or are being shut down. The region accounts for 17% of the total US crude oil production, as per the EIA.

- Even though the Permian Basin has been a prolific producer for the US till now, lately, the operators there have been facing challenges in terms of remaining profitable. The rising sand costs as well as higher than expected gas production from liquids wells from the productive parts of the Basin, and the overall rising completion costs are some issues that the operators are grappling with. These issues together with the fact that there are signs that the demand is somewhat increasing (as mentioned in my last post), as well as the news that US inventory levels have been falling over the last few weeks, are reasons that the OPEC strategy may be working. However, if the Permian operators tighten their performances to reduce production costs by becoming more efficient and adopting more cost cutting measures, then OPEC will think twice before deciding on extending their production cut agreement beyond March 2018.

So much for the industry news this week.

For the lighter side this week

I came across an interesting fact recently, that there are no bridges across the Amazon river.

Considered as the world's largest river by volume – the Ate Amazon river is ~6400 km long and flows through Guyana, Ecuador, Venezuela, Bolivia, Brazil, Columbia and Peru. Per a recent study, the source of this river is the Cordillera Rumi Cruz, the starting point of water in the Mantaro River in southwestern Peru, and flows from west to east.

The Amazon discharges 209,000 cubic meters of fresh river water per second in the Atlantic Ocean. This represents 20% of the global river discharge into the oceans. It has over 200 tributaries and its drainage area covers one-thirds of the South American continent. The Amazon River is located at the equator for the most part, in a warm tropical zone, an area that receives over 400 inches of rain every year.

During the rainy season, the Amazon floods every year and can reach a variable width of up to 190 km, and the level of water can rise by 9m. As the river flows, it carries with it a huge load of sediments, and debris which discharges into the ocean with high energy. Consequently, there are no deltas formed at the point of discharge.

For the most part, the Amazon flows through the rainforest in Brazil, where there are few roads. Most of the cities along its length are located along its banks. The river itself serves as the main route for traffic by ferries and boats. There is no real necessity of a bridge over the Amazon as the traffic just doesn't justify it. It may also not be practical to build a bridge, considering the variable or shifting width of the river, with all soft sediments on the ground, and no hard bedrock. The sediments are easily eroded in the wet season.

Having said this, a bridge has indeed been constructed across the Rio-Negro river, one of Amazon's tributaries, which connects the Brazilian cities of Manaus and Iranduba. It is a cable stayed bridge, ~ 3.6 km long, and was constructed in 2010.

Did you know?

..... that elephants can smell water more than 3 miles away?

An elephant's nostrils are located at the tip of its trunk, and the nasal cavity inside has five times more smell receptors (called olfactory receptors or ORs) than humans, and twice as many as domestic dogs. This gives the elephants a strong sense of smell, and African elephants have the highest numbers of genes related to smell. These findings are based on studies carried out on thirteen different mammals.

I hope you find these interesting.

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