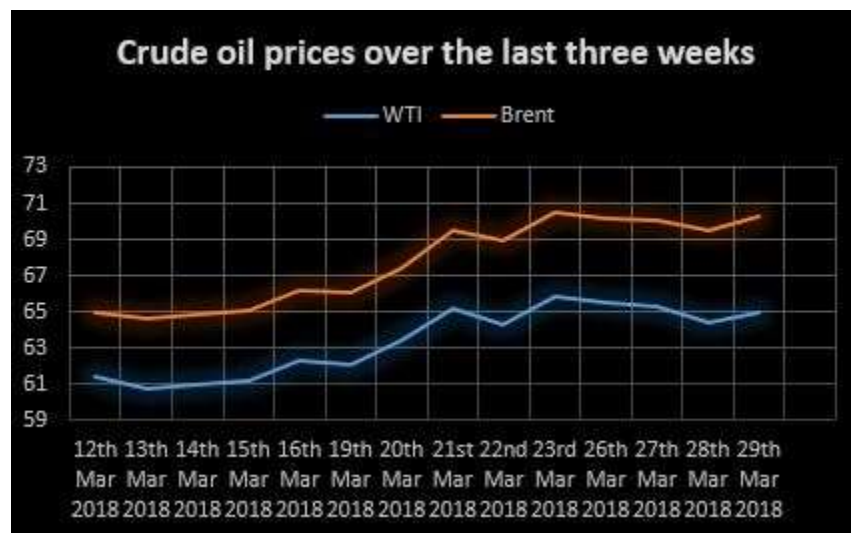
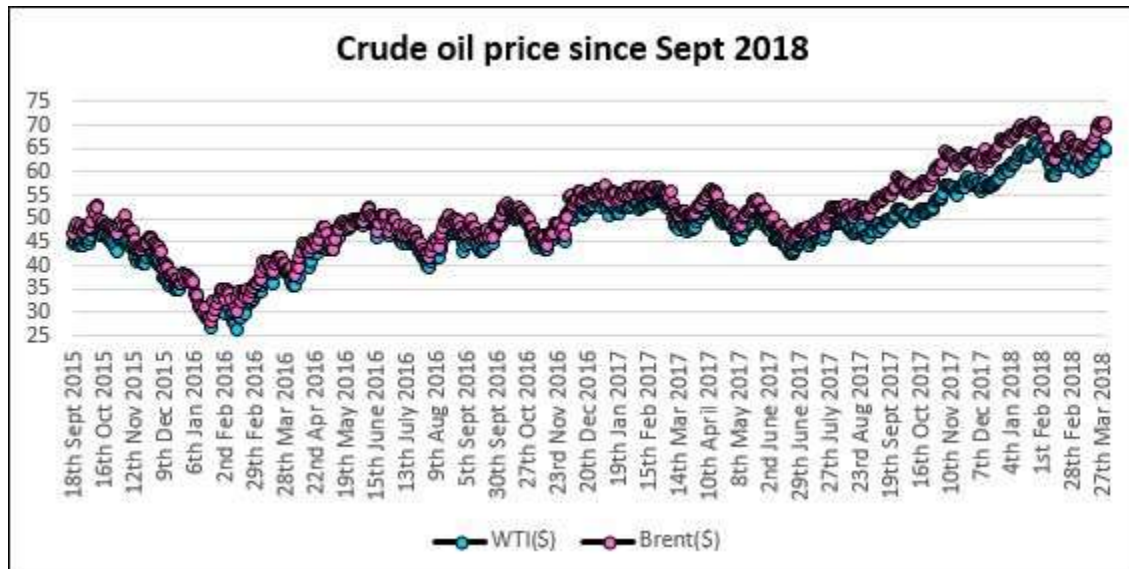


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- Crude prices slipped a bit on fears/speculation that US stockpiles have been expanding, and this trend persisted over the first three days this week. But the barrel looked up on Thursday when news came around that OPEC and allies, including Russia, may extend their oil cut cooperation beyond 2018. Some OPEC producer members have been sounding their support for extension of production cuts, even though OPEC and IEA have forecast that the production cuts will eliminate the inventory surplus this year. This week was short, Good Friday being a holiday.
- A recent report by Goldman Sachs Group says that as the recent downturn has wiped out some of the smaller companies, it has enabled the bigger ones to carry out their businesses by driving costs down and increasing efficiency; the latter are now in a good situation. The rising oil prices and their low operational costs are leaving them with big cash flow growth in two decades. This

could be the beginning of a new era for these big companies, as they avail the opportunity to increase their market share. As examples, the report cites Royal Dutch Shell, Total and BP that have reported the highest earnings last quarter in years.

- As per a Federal Bank of Dallas report released last Wednesday, operators can drill a new well in the Permian Basin at the current oil prices. For this report, 136 oil and gas executives were interviewed, and half of these have said that they are increasing the headcount in their companies. The report says the operators need \$52 a barrel to cover the cost of development of a new well and just \$35 for existing wells. The Permian is a hot area these days, and the most recent news is the Concho Resources has acquired RPS Permian for \$8 billion to increase their resource base there.

So much for the industry news this week.

On the lighter side

We have all heard of earthquakes, even though the mention of that word brings thoughts of destruction and suffering. But have you heard of ice quakes? Yes, you got it right. Ice quakes!

Ice quakes occur when cold winter temperatures cause ground water to freeze quickly, and which causes the ground to suddenly crack. They are also known as cryoseisms or frost quakes, as the sudden cracking action of the frozen rock saturated with water, may cause a seismic event of small magnitude. Such events are known to shake houses, but are localized and not widely spread.

Cryoseisms are found to typically occur when temperatures rapidly decrease from freezing to negative, which makes the water-saturated ground to expand, leading to a buildup of explosive stress, resulting in fractures or cracks in the earth. The effect is similar to putting ice cubes in a glass of pop, when you hear them crackle.

A different type of a cryoseism is also known to be caused by a sudden glacial movement, wherein a layer of water may seep under a glacier that is formed by melting of surface ice. A sudden slip or shifting of position of the glacier over the water can cause a cryoseism, where the latter acts as a lubricant.

Cryoseisms are not caused by shifting tectonic plates, and thus do not pose the same danger, though they may initially appear to be similar in terms of the thundering, loud rumbling, or booming sounds.

Cryoseismic have been reported in the northern, mid-western and northeastern US. They have also occurred in Alberta, Ontario, Quebec and the maritime provinces in Canada.

A recent (January 2, 2018) ice quake was reported in a village west of Edmonton, Canada, when residents woke up on hearing a loud sound. In the morning, they found cracks in homes and the ground. The event was later confirmed by Alberta Energy Regulator to be two seismic events of approximately 2.0 magnitude on that night.

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

Till the next post, stay safe and happy!