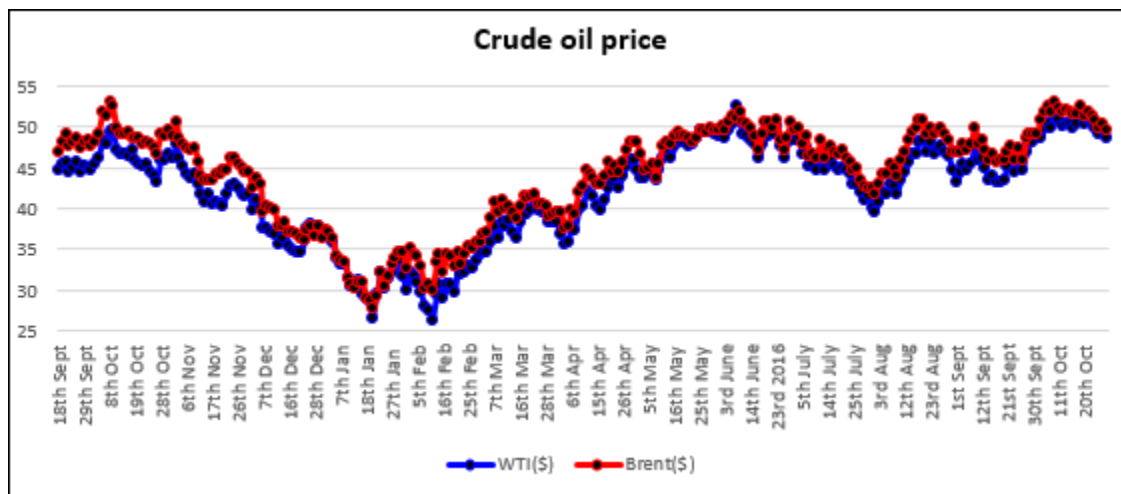


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Some of the news items for this week are as follows:



- This week the price of crude oil fluctuated between \$48 and \$51. The price looked up a bit due to a drop in the crude oil inventories. According to the EIA, for the week ended Oct 24th, the US commercial crude oil inventories, excluding the Strategic Petroleum Reserves declined 600,000 barrels from the previous week's number. The total stood at 468.2 mb. US crude oil imports averaged 7 mb/d, which is a rise of 109,000 b/d from the previous week. On the flip side, Nigeria and Libya have managed to increase their production by 300,000 and 220,000 b/d from last month. Similarly, Russia increased its production by 100,000 b/d from last month. Also, Kazakhstan's massive Kashagan oil field has begun production. All this has added more oil in the market.
- Iraq has asked OPEC to exclude it from making production cuts so as to improve prices, as it is fighting Islamic militants. Nigeria and Libya were exempted in the OPEC meeting in Algiers because their oil industry is in bad shape due to violence. Iraq is currently producing 4.7 mb/d. Russia has agreed to cooperate in stabilizing oil prices. OPEC members, Gabon, Angola, Algeria and Ecuador may help, but Saudi Arabia may have to look forward to Kuwait and UAE for cooperation. Otherwise, it will be left alone to meet the agreed reduction in OPEC's overall production to be between 32.5 and 33 mb/d.
- Industry analysts are skeptical about OPEC's proposed cuts having any significant impact on oil prices. The global crude oil supplies have exceeded demand for the last three years. Even if the OPEC production cuts go through in cooperation with Russia, it will be a small reduction, and it could take years for the market to rebalance.
- The US rig count was up 14 this week reaching 553 according to data from Baker Hughes Inc.
- One of the suggestions put forward is that at the next OPEC meeting, some of the non-OPEC high oil-producing countries should also be participants. Russia had been a participant at the Algiers meeting last month, and going forward, the suggestion is for the US to be a participant as well. An

interim OPEC meeting is scheduled for Monday (29th Oct, 2016) at Vienna for discussions on output cuts for different members and seeking cooperation from non-members.

- Before the meetings, many of the OPEC members (like of Iran, Iraq and Venezuela) have increased their crude oil production to gain leverage during the talks. This way the concessions asked for in the talks may not be as significant for them. These members have also complained that OPEC is picking up production figures from third party sources, which are not accurate, and that the figures released by the countries themselves should be accepted.
- Statoil has posted a loss for Q3, the second consecutive loss due to lower crude oil and gas prices as well as maintenance and exploration expenses. The company has reduced its capex spending from \$12billion to \$11billion, and exploration spending from \$1.8 billion to \$1.5 billion. ConocoPhillips reported a Q3 net loss of \$1billion. The company plans to reduce its capex for the year from \$5.5 billion to \$5.2 billion.
- After reporting a \$2.16 billion net loss last quarter, Schlumberger, the world's largest oilfield services provider, reported an improvement in its North American business, with a net income of \$176 million. This positive news follows Halliburton reporting a Q3 profit recently.
- The oil price rally seen over the last few weeks has probably come in late for many oil service companies, who have had to file for bankruptcy. During 2015 and 2016, as the oil prices fell, at least 100 North American oilfield service companies have gone bankrupt. The two most recent ones to file for bankruptcy are Key Energy Services and Basic Energy Services.
- The gloom in the industry continues with news of companies announcing job cuts or jobs under threat. Italy's Saipem is to cut 600 jobs, Singapore's Sembcorp Marine is cutting 8000 jobs, MacGregor, 260, Denmark's Maersk Drilling, 70, Amec Foster Wheeler identified 650 surplus jobs, France's Technip Umbilicals is looking to cut 100 jobs from Newcastle, UK, and Schlumberger's One Subsea (ex-Cameron) facility in Leeds, UK, has 600 jobs under threat.

So much for the industry news this week.

For the lighter side this week

A couple of weeks ago, while ascending to my office on the 20th floor, I read a headline on the elevator monitor that said – the *bigger the yawn, the bigger the brain*. I was intrigued by this, but was busy last week, travelling to Dallas for attending the SEG Convention, and so could not get to this. On getting back I tried to explore the connection between the yawn and the brain.

This news comes after a psychologist, Andrew Gallup of the State University of New York at Oneonta (a city in southern Otsego county, New York), and his team published the results of their findings in *Biology Letters* on October 4th, 2016. The team looked at videos of 29 mammals, examined the yawns of 109 individuals from 19 species extending from humans, African elephants, walruses, mice rabbits and monkeys, and found that the longer the yawn, the bigger the brain.

It comes as a surprising link between the length of a yawn and the size of the brain, as one would expect bigger animals like elephants and gorillas to have bigger brains also. But that is not true, as they have smaller brains. And the average yawn lengths of gorillas, elephants, camels, horses, lions and walruses are smaller than humans. On an average, a human yawn lasts for about 6.5 seconds, which is the longest amongst all the animals considered.

Andrew Gallup had proposed a theory, known as *thermoregulatory theory of yawning* in 2007, that animals yawn to cool their brains, according to which, as the jaws open and cool fresh air with oxygen inhaled deeply, the blood flow to the brain can increase, replacing warm blood there with cooler blood from the heart, thereby cooling the brain. If an animal possesses a larger brain, it would take longer to cool by yawning.

Interestingly, as mentioned above animals have smaller brains than humans, and the length of a yawn does not correlate with the size of the animal body, as one might expect, but seems to correlate with the size of the brain.

He proves his theory with some data that he collected. By implanting temperature probes in rat brains, he found that yawning does cool their brains. Another experiment he conducted was that a person holding a cold pack to his head is less likely to begin yawning. Finally, he found that when the temperature of air around is neither too hot, nor too cold, yawning is more common. This theory could be debatable, but for the present seems logical.

For humans, the body temperatures seem to fluctuate in 24 hour cycles. They are the highest in the evening, when we are tired, they fall when we sleep and again begin to rise when we wake up. Yawning is common in the evening and early morning. This also implies that larger brains would require longer yawns, which served as motivation for the fresh exercise.

It would be interesting to carry out investigations on more intelligent animals, and find out how they behave with their yawns.

Other strange indications you may come across are

- Intelligent individuals are more inclined to swear or use foul language.
- People who make sarcastic comments are often better at finding creative solutions to a cognitive task.

I wish researchers find explanations for these strange behaviours also.

I hope you will find them interesting.

Did you know?

Which animal is pregnant for the longest time and for how long?

Answer: Elephant, 22 months.

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