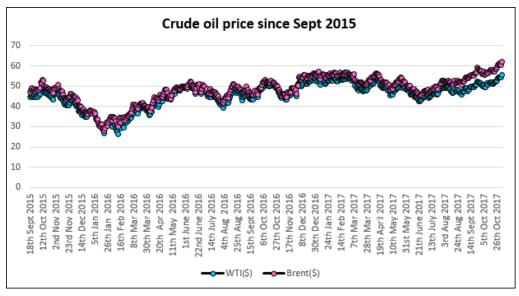
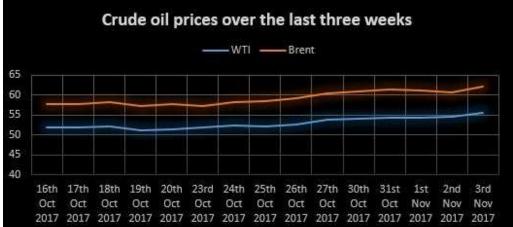
www.chopraseismic.com Calgary, Canada

I had been travelling recently, and that is reason for my absence from my social media outlets as well. I was in Argentina for two weeks, and as before my interaction with Argentine people was very enjoyable. The weather there was very pleasant (18 to 20°C), as they are just coming out of winter. In contrast, here in Calgary it has been very cold over the last few days, and this morning it was -18°C, and -22°C with the wind chill.

I will add my tour details for the Argentina trip under 'Events' along with many pictures that I clicked while travelling.





 Crude oil traded at \$54 and higher this week on speculation. Saudi Crown Prince, Mohammed Bin Salman in an interview had said recently that, 'of course' he wanted the OPEC's output reduction deal into 2018. These comments followed President Putin's recent statement that an extension should run through at least the end of next year. These statements from the world's biggest oil exporting countries, has brought hope that an agreement will be reached at the OPEC meeting in Vienna later this month. UAE has also backed this extension.

• As you may have noticed in the graphics above, the difference between the WTI and Brent pricing has widened by as much as \$6 over the last two months. Historically, such a difference has led to changes in the supply of crude to petroleum refineries in the US East Coast. Prior to 2011, the refineries in the US East Coast processed imported crude oil as it was a cheaper alternative to transportation of domestic supply. Between 2011 and 2013, the WTI prices fell, as the US domestic production grew faster than transportation, storage and refining capacity could accommodate, and the large price difference prompted the East Coast refineries to source domestic crude oil by investing in crude by rail projects and shipping. By January 2014, the receipts of domestic crude at these refineries equaled receipts of foreign crude, and grew to 60% by February 2015. The price difference between WTI and Brent narrowed down for the rest of 2015, and in 2016 it averaged to less than \$1 per barrel. This led to many East Coast refiners cancelling or not renewing their contracts, and thus the domestic crude receipts decreased to 101,000 b/d in July 2017.

Since then hurricanes Harvey and Irma have extensively disrupted oil refineries distribution systems, and the consumption of domestic crude got curtailed therein, leading to build up of crude stocks.

As well, the US export terminals were affected by the hurricanes, which reduced the exports from 902,000 b/d in August end to 153,000 b/d by the week ending September. Considering the long time the refineries take to resume full capacity, the spread in WTI and Brent may continue till the end of this year, or even go to Q1, 2018. This price gap of course would encourage the excess crude from the US to tighter markets in Europe and Asia.

- Since 2014, our industry has lost about 440,000 jobs worldwide. But per recent industry surveys, almost 90% of employers expect their staffing levels to stay the same, or increase in 2018. There is optimism in the industry that investment will increase, and when this happens, new hiring will begin.
- Last week, Total posted its highest Q3 earning in two years, and reported an adjusted income of \$2.67 billion, which is 29% higher than a year ago.
 - ExxonMobil's net income rose to \$3.97 billion from \$2.65 billion a year ago. Similarly, Chevron's net Q3 income rose to \$1.99 billion from \$1.3 billion a year ago. Shell's Q3 adjusted profit was \$4.1 billion which is 47% higher than a year earlier. Shell generated a cash flow of \$28.38 in the first 9 months of 2017, which is higher than ExxonMobil's \$23.52 billion, and thus has become the number one company, in terms of cash flow.
- Interestingly, Saudi Arabia has reduced its break-even oil price from \$96 to \$70. This price is a
 measure of the crude oil price required to meet spending plans and balance its budget. Other
 oil-producing countries in the Middle East are also expected to reduce their break-even prices
 for 2018. All these countries have yet to create economies that will support their people, when
 the oil money dries up.

So much for the industry news this week.

Raw spinach forms an essential component of a salad bar these days. Spinach forms an excellent source of iron, containing twice as much as other green vegetables. It is also a good source of folate, magnesium, riboflavin, potassium, antioxidant carotenoids and vitamins A, B-6, C, E and K. An interesting question that I recently saw on an elevator news monitor was: *should we consume raw or cooked spinach*. This prompted me to check it out.

Raw spinach contains oxalic acid, a colourless organic substance that binds with calcium, magnesium, iron and zinc to form insoluble salts called oxalates, and thus prevents them from being assimilated in our bodies. In the long term this can cause nutrient deficiencies.

When spinach is cooked, the oxalic acid is broken down, so that now more nutrients are available.

Some nutritionists opine that cooking can destroy some vitamins in vegetables, and there is truth in it. But cooked spinach lets our bodies absorb higher levels of vitamin A and E, protein, fiber, zinc, calcium and iron, as I said above, along with some important carotenoids. Cooking releases antioxidants in them by breaking down cell walls.

Personally, I like all vegetables when they are cooked. Even broccoli, carrots and cauliflower that I often see served raw on a salad bar, at home they are steamed a little bit, so that they don't feel raw under the teeth, but are still firm enough. With the dressing, they taste wonderful.

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

Till the next post, stay safe and happy!