

# The price of crude oil

When in December of 2013, the crude oil price reached 110 Dollars per barrel, few economists foresaw the decline that would reach close to half that level by December of 2014. What caused this decline, at what price may it bottom out and when if ever may we see a return to 2013 levels?

## Cause and effect.

The price of oil is only to a certain extent the result of supply and demand. Developments in and expectations of the global economy, the proven reserves in oil producing countries, new technologies in exploration and exploitation, and environmental concerns among others influence the perception of the value of a barrel of crude oil. During the post Second World War era, the expanding western economies depended mainly on supplies from the prolific Middle East and for three decennia, the price would be relatively stable, between \$ 2.50 and \$ 9.00 per barrel.

The next 30 years would see a dramatic change that through a number of fluctuations due to interference from producing countries, would result in a per barrel price north of a hundred dollars. Traditionally, the upstream and downstream oil industry is controlled by a limited number of large conglomerates. The high oil price incentivized medium- and small companies to enter the industry, supported by cheap market capital during low interest rate periods. This flow of funds benefitted the expanding service companies allowing them to introduce new innovative technologies to the producers, who increased production as a result of it. However, the dawning of the Asian economies, especially China, the positive developments in Europe, North America and developing countries, caused pressure on pricing since the increased demand outpaced production during the last decennia of the 20th century.

Then technology completely changed the game.

65 years ago, a well stimulation technique called hydrolic fracking was invented. It would take half a century, technical improvements and high oil prices to develop this technology into the present game changer. In combination with ultra deep drilling, multi-directional coiled tubing allowing a multitude of feeders from one wellbore, and innovative exploration solutions, technology rather than supply and demand changed the equation.

Fracking was mentioned by several commentators as the most important innovation of the 21st century, ahead of iPhone, Facebook etc. (Ezra Levant: Groundswell, The Case for Fracking) (Russell Gold: The Boom: How Fracking ignited the American Energy Revolution and Changed the world.) How could that be?

Previously inaccessible oil and gas became accessible and oil could be extracted from shale rock formations, self-sufficiency in energy production suddenly became within reach of the world's largest oil importer, the USA.

Shale oil and gas extraction is now spreading around the world and countries from China to Argentina are in the process of developing and exploiting their own reserves. Canada, with its oil sands and new extraction technology, now ranks as number three in the world in oil reserves. Mexico, for many years granting a monopoly to its National Oil Company, opened its industry to foreign competition, which will increase production. The NAFTA (USA-Canada-Mexico) has the potential to become a net energy exporter.

Supply and demand however is still a factor and the weak economic growth of recent years and the increase in alternative energy sources slowed demand. But infrastructure is in place, many wells are drilled and oil for the foreseeable future will flow from wells in non-OPEC (Organisation of Petroleum Exporting Countries) countries.



## The OPEC impact.

OPEC, with 40% of the world's oil production, is still a force to reckon with. But its dramatic impact on the western economies as a result of the oil-supply and energy crises of the seventies is a thing of the past. OPEC in theory is still able to influence the price of oil, but production should be significantly reduced to have the desired effect. Abdallah Salem el-Badri, the OPEC secretary general, made it very clear, when he stated that no production cuts are to be expected for the foreseeable future. Why is that?

OPEC intends to hang on to its market share and is able to do that for an extensive period at per barrel prices much lower than the present market dictates, but not indefinitely. The steady flow of dollars towards the Middle East, created societies with a standard of living requiring an oil price far above the cost of production, which obviously was not the case during the first 30 years after the Second World War. According to the Canadian Organization of Oil Producers, the break-even point in North America is at about 60 US Dollars per barrel. Significantly below that level, middle and small producers will not survive. Wood Mackenzie claims that 32 potential European oilfield developments, able to produce 4.9 billion barrels of oil, may be mothballed below \$60 per barrel (The Economist).

OPEC may be expected to follow the decline and the time it lasts before it decides what the impact of low pricing was on the supply side, before it interferes through significantly reducing production. The problem is, however, that the falling demand and the price adjustments are structural and not cyclical; net energy importing countries may adapt their policies accordingly.

## Russia

After Perestroika and Glasnost, the rejuvenated oil industry of Russia became a significant exporter of oil and gas. As a result of high oil prices and the steady supply of natural gas to the European market, the standard of living in Russia gradually improved. But depending too much on income from energy export was to the detriment of developments in other industry sectors, (a vulnerability compared to the Dutch Disease by Frances Coppola in Forbes). Energy exports totaled approximately \$300 billion per year, representing nearly 70% of Russia's foreign currency and half of its annual budget. The falling oil price spells disaster for Russia, and while the Ruble is falling in line with it, a recession is now unavoidable. How long it may last is anybody's guess. Beside market fluctuations Moscow's Ukraine position and Western sanctions will have an unpredictable impact on stability in Russia and may determine the Kremlin's ability to maintain current policies.

Unlike OPEC, Russia's ability to increase or decrease production and supply is hampered not only by pricing, but also by not widely publicized problems in Russia's oil industry. Russia badly needs to develop new resources, the main reason for cooperation with western companies like Exxon. It also needs access to the capital market. Once prolific Siberian production is declining fast and without developing shale deposits there, and without developing Arctic resources, Russia's dependence on energy related revenues will be under pressure. Could a decrease in oil and gas exports from Russia have a positive impact on the price of oil? Not really, there is overhang enough in the market to compensate for any shortfall.

With giant conglomerates like LUKOIL, GAZPROM and ROSNEFT, the technical ability and infrastructure is available, but there may not be enough capital flowing back into the industry to finance developments. With the Bazhenov field, Russia may have the largest shale oil reserves in the world, many times the US Bakken formation. Without western cooperation in exploration, well-service technology and capital it may take many years before Russia may benefit from what they term this 'Hard to recover oil'.

Presently the Russian oil industry is suffering from the withdrawal of western service companies complying with applicable laws. To quote Dmitry Lebedev, "The Russian oil services industry is in a bad shape, it always was, it's like having an old Russian Lada instead of a Mercedes" (Financial Times, 29 Oct 2014).

## Price developments

The price fluctuations of the past decennia on average lasted about 6 months. Based on this, it would be fair to assume that in mid 2015 the price level may move upwards of 60/70 dollars per barrel. The fundamentals however this time are different. Oil production is no longer the prerogative of traditional producers and the Middle East. Shale formation production brought many new players to the game and natural gas as a source of energy, is increasingly replacing oil. Although the benefits of low oil prices will stimulate the economy in non-producing countries, a significant increase in demand is not predicted and increase in production will shift away from countries that depend to a large extent on oil export. Efforts to stop developments in shale formations will not succeed; the potential is too lucrative and neither OPEC nor Russia can afford to influence the price through significantly lower production. For the next 6 to 12 months the Western oil companies will have to live with a price level of 50 dollars per barrel or less. Budgets will be adjusted and cost cutting will be deep, the past boom increased costs dramatically, as a result the break-even price point will shift. A gradual increase to 60 to 70 dollar levels near the end of 2015 seems feasible. Given the dramatic increase in reserves and the large number of players in the shale oil market, a 100 dollar per barrel price may not return for the foreseeable future.

Mr. Fred Balm  
Chairman  
Emergo Group

If you have any questions regarding our services please do not hesitate to contact us at [info@emergowealth.net](mailto:info@emergowealth.net) or +357 22 449122